Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Master Agreement

Order Date: 07-19-2022

CORRECT ORDER NUMBER MUST APPEAR ON ALL PACKAGES, INVOICES, AND SHIPPING PAPERS. QUESTIONS CONCERNING THIS ORDER SHOULD BE DIRECTED TO THE DEPARTMENT CONTACT.

Order Number:	CMA 0803 0803 DOT2300000005 1	**Procurement Folder:**	887002
Document Name:	FLEET MANAGEMENT SYSTEM - 7021EC12	**Reason for Modification:**	
Document Description:	FLEET MANAGEMENT SYSTEM		
Procurement Type:	Central Master Agreement		
Buyer Name:			
Telephone:			
Email:			
Shipping Method:	Best Way	**Effective Start Date:**	2022-08-01
Free on Board:	FOB Dest, Freight Prepaid	**Effective End Date:**	2023-07-31

VENDOR

Vendor Customer Code: 000000189604
ASSETWORKS INC
998 OLD EAGLE SCHOOL RD #1215

WAYNE PA 19087
US
Vendor Contact Phone: 2153541078 **Extension:**

Discount Details:

	Discount Allowed	Discount Percentage	Discount Days
#1	No	0.0000	0
#2	No		
#3	No		
#4	No		

DEPARTMENT CONTACT

Requestor Name: Kristine E James
Requestor Phone: 304-414-7104
Requestor Email: kristy.e.james@wv.gov

23
FILE LOCATION _____

INVOICE TO

DIVISION OF HIGHWAYS
OFFICE OF THE SECRETARY
1900 KANAWHA BLVD E, BLDG 5 RM A109
CHARLESTON WV 25305-0440
US

SHIP TO

DIVISION OF HIGHWAYS
EXECUTIVE DIVISION
1900 KANAWHA BLVD E, BLDG 5
CHARLESTON WV 25305-0430
US

Total Order Amount:	Open End

Purchasing Division's File Copy

ENTERED

7/20/2022

PURCHASING DIVISION AUTHORIZATION	ATTORNEY GENERAL APPROVAL AS TO FORM	ENCUMBRANCE CERTIFICATION
DATE: 7/25/22	DATE: 7/26/2022	DATE: 7/27/2022
ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE

Extended Description:

THE VENDOR, ASSETWORKS, AGREES TO ENTER WITH THE AGENCY, WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS INTO AN OPEN-END CONTRACT FOR TECHNICAL EXPERTISE FOR THE DEVELOPMENT, IMPLEMENTATION AND SUPPORT OF WVDOT FLEET MANAGEMENT SYSTEM PER THE TERMS AND CONDITIONS, SPECIFICATIONS, BID REQUIREMENTS, ADDENDUM NO. 1 ISSUED 08/17/2021, ADDENDUM NO. 2 ISSUED 09/03/2021, ADDENDUM NO. 3 ISSUED 09/13/2021 AND THE VENDORTECHNICAL AND COST PROPOSAL DATED 09/22/2021, INCORPORATED HEREIN BY REFERENCE, AND MADE A PART OF HEREOF.

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
1	43233701				0.000000
	Service From	**Service To**			

Commodity Line Description: DEVELOPMENT IMPLEMENTATION SUPPORT FLEET MGT SYSTEM

Extended Description:
SOFTWARE DEVELOPMENT, INSTALLATION, SUPPORT AND TRAINING

See attached Pricing Pages

ORDER OF PRECEDENT AND MODIFICATION ADDENDUM

THIS ORDER OF PRECEDENT AND MODIFICATION ADDENDUM, (hereinafter "Addendum") by and between AssetWorks LLC ("AssetWorks") and the State of West Virginia Department of Transportation (hereinafter "State"), (both referred to as "Parties"), is intended to identify all contractual documents that comprise the contract, provide an order of precedent for those documents, and amend documents to establish a contract resulting from the solicitation for vehicle management services identified as CRFP DOT2200000001, Procurement Folder PF887002 (the "Contract").

NOW THEREFORE, the Parties hereto hereby agree as follows:

1. **Order of Precedence:** The Contract is comprised of the documents listed in this section. The terms and conditions contained in the various documents shall be interpreted according to the priority given to the Contract document in this section. In that way, any terms and conditions contained in the first priority document shall prevail over conflicting terms in the second priority document, and so on.

   Contract Documents:

   a. **Order of Precedence and Modification Addendum** (this document) – First Priority
   b. **State of West Virginia General Terms and Conditions** (Attached as Exhibit A, Request for Proposal, Section 3) – Second Priority
   c. **Notice of State of West Virginia Confidentiality Policies and Information Security Accountability Requirements** (Attached as Exhibit B) – Third Priority
   d. **Mandatory Requirements Contained in the Request for Proposal** (Attached As Exhibit C, Request for Proposal and Addenda, excluding General Terms and Conditions) – Fourth Priority
   e. **AssetWorks Proposal** (Attached as Exhibit D) – Fifth Priority
   f. **AssetWorks Master Agreement** (Attached hereto as Exhibit E) – Sixth Priority
   g. **Other Vendor Documents** (Attached as Exhibit F) – Seventh Priority

2. **Modifications:** The documents listed below are modified as indicated below.

   a. **AssetWorks Proposal** (Exhibit D)**:** The Exceptions identified on pages 65 and 66 of the AssetWorks Proposal are expressly rejected and the proposal is modified by removing them in their entirety. Only those exceptions expressly incorporated herein below will be included in the Contract.

   b. **General Terms and Conditions:** The General Terms and Conditions (Exhibit B) are modified as shown below.

      i. The term entitled "7. PERFORMANCE BOND" is modified by removing the phrase "of the contract" from the first sentence and inserting the phrase "implementation cost bid by Vendor" in its place.

      ii. The term entitled "20. TIME" is modified by removing it in its entirety.

      iii. The term entitled "28. WARRANTY" is replaced in its entirety as follows:

      "28. WARRANTY: AssetWorks warrants that its software will confirm to the description contained in the documentation provided or published by AssetWorks but makes no other representations, warranty, or guarantees, express or implied, with

"28. WARRANTY: AssetWorks warrants that its software will confirm to the description contained in the documentation provided or published by AssetWorks but makes no other representations, warranty, or guarantees, express or implied, with respect to the accuracy, completeness, or usefulness of the software, INCLUDING EXPRESS OR IMLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AssetWorks covenants and warrants that it will perform all services with due diligence, in a professional and careful manner, and in compliance with all applicable laws and governmental regulations.

v. The term entitled "36. INDEMNIFICATION" is replaced in its entirety as follows:

AssetWorks agrees to indemnify Customer for third party claims to the extent and proportion of the negligence of AssetWorks.

c. **AssetWorks Master Agreement:** The AssetWorks Master Agreement is modified as indicated below.

i. Any language imposing any interest or charges due to late payment is deleted.

3. **VOID CONTRACT CLAUSES** – Notwithstanding anything contained herein to the contrary, the parties understand that this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

4. **FIRM PRICING:** The Parties understand and agree that pricing submitting in the RFP will remain firm for the duration of the contract term to which the pricing applies. The Parties further agree that pricing for commodities or services beyond the timeframes contained in the RFP is not part of this Contract and therefore not required to be held firm.

IN WITNESS WHEREOF, the Parties have entered into this Addendum as of the date of last signature below.

STATE OF WEST VIRGINIA

By: Dawna A. Cook

Name: Dawna A. Cook

Its: Deputy Business Manager

Date: 5/12/22

ASSETWORKS LLC

By: Rob Hallett

Name: Rob Hallett

Its: General Manager

Date: 5/6/2022

EXHIBIT A

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

SECTION 3: GENERAL TERMS AND CONDITIONS

Terms and conditions begin on next page.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or **"Proposal"** means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☑ **Term Contract**

Initial Contract Term: This Contract becomes effective on August 1, 2022 and the initial contract term extends until one year (1).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to (3) three successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

☐ **Alternate Renewal Term** – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for _____ year(s) thereafter.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☑ **Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☑ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☑ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

☐

☐

☐

☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

☑ **Commercial General Liability Insurance** in at least an amount of: 1,000,000.00 per occurrence.

☑ **Automobile Liability Insurance** in at least an amount of: $500,000.00 per occurrence.

☑ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: $1,000,000.00 per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: _____ per occurrence.

☐ **Cyber Liability Insurance** in an amount of: _____ per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: _____ per occurrence.

☐ **Aircraft Liability** in an amount of: _____ per occurrence.

☐

☐

☐

☐

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. [Reserved]

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☑ $1,000.00 per day for being more than 10 business days late achieving live date based on approved project schedule.

☐ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

> **SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. PURCHASING AFFIDAVIT: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least $1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES – This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

John Crane
(Name, Title)

John Crane, National Sales Executive
(Printed Name and Title)

998 Old Eagle School Rd #1215, Wayne, PA 19087
(Address)

+1 484-801-0317 x1161/ Fax: 610-971-9447
(Phone Number) / (Fax Number)

john.crane@assetworks.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

AssetWorks LLC
(Company)

Robert Hallett, General Manager
(Authorized Signature) (Representative Name, Title)

Robert Hallett, General Manager
(Printed Name and Title of Authorized Representative)

30 August 2021
(Date)

610-687-9202/ Fax: 610-971-9447
(Phone Number) (Fax Number)

Exhibit B

Notice of State of West Virginia
Confidentiality Policies and Information Security Accountability Requirements

1.0 INTRODUCTION

The Executive Branch has adopted privacy and information security policies to protect confidential and personally identifiable information (hereinafter all referred to as Confidential Information). This Notice sets forth the vendor's responsibilities for safeguarding this information.

2.0 DEFINITIONS

2.1 **Breach** shall mean the acquisition, access, use or disclosure of Confidential Information which compromises the security or privacy of such information.

2.2 **Confidential Information**, shall include, but is not limited to, trade secrets, personally identifiable information, protected health information, financial information, financial account number, credit card numbers, debit card numbers, driver's license numbers, State ID numbers, social security numbers, employee home addresses, employee marital status, employee maiden name, etc.

2.3 **Security Incident** means any known successful or unsuccessful attempt by an authorized or unauthorized individual to inappropriately use, disclose, modify, access, or destroy any information.

3.0 BACKGROUND

Agencies maintain Confidential Information, including, but not limited to, trade secrets, personally identifiable information, protected health information, financial information, financial account numbers, credit card numbers, debit card numbers, driver's license numbers, State ID numbers, social security numbers, employee home addresses, etc. Federal laws, including, but not limited to, the Health Insurance Portability and Accountability Act, the Privacy Act of 1974, Fair Credit Reporting Act and State laws require that certain information be safeguarded. In some situations, Agencies delegate, through contract provisions, functions to vendors that involve the vendor's collection, use and/or disclosure of Confidential Information. WV State government must take appropriate steps to ensure its compliance with those laws and desires to protect its citizens' and employees' privacy, and therefore, must require that its vendors also obey those laws.

Utilization of safeguards can greatly minimize potential exposure to sensitive information, and vendors are expected to adhere to industry standard best practices in the management of data collected by, or on behalf of, the State, and in the vendor's possession for a business purpose. Even when sound practices and safeguards are in use, exposures can occur as the result of a

theft, loss, or compromise of data, or systems containing data. At these times, vendors must be accountable for the loss of data in their possession by ***immediately reporting*** the incident surrounding the loss, and by absorbing any cost associated with the appropriate response actions deemed by the State to be reasonable and necessary. Additional vendor funding may be needed for required activities, such as: rapid notification to affected persons, and provision of a call center to handle inquiries. Notification and call handling will use a State-specified method, format, language, and personnel staffing level.

4.0 POLICY

4.1 All vendors for the Executive Branch of West Virginia State government shall sign both the RFP or RFQ, as applicable, and the Purchase Order which contain the confidentiality statement, incident response accountability acknowledgement, and adopt this policy by reference.

4.2 Vendors must contact the Privacy Officer of the Agency with which they are contracting to obtain Agency-specific privacy policies, procedures and rules, when applicable.

4.3 For vendors' information, Agencies generally require at least the following minimum standards of care in the handling of their Confidential Information:

4.3.1 Confidential Information shall only be used or disclosed for the purposes designated in the underlying contract and at no time shall it be disclosed or used for a personal, non-work or non-contract related reason, unless specifically authorized in writing by the Agency.

4.3.2 In all circumstances, vendors shall have no ownership rights or interests in any data or information, including Confidential Information. All data collected by the vendor on behalf of the Agency, or received by the vendor from the Agency, is owned by the Agency. There are no exceptions to this provision.

4.3.3 In no circumstance shall a vendor use Confidential Information, or data, in any way detrimental to the Agency or to any individual whose records reside in the vendor's control. This prohibition shall not be construed to curtail a vendor's whistleblower rights under Federal and State law. If, in the process of making a good faith report under the provisions of W. Va. Code § 6C-1-1 et seq. or the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), (Pub. L. No. 104-191) as amended by the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5) (the "HITECH Act"), any associated regulations and the Federal regulations published at 45 CFR parts 160 and 164 (sometimes collectively referred to as "HIPAA") or any other relevant whistleblower law, a vendor finds it necessary to

disclose Confidential Information to an appropriate authority in accordance with those statutes, the disclosure will not be treated as a Breach of the Agency's security, privacy or confidentiality policies, as long as the confidential nature of the information is explicitly conveyed to the authorized recipient.

4.3.4 The State may periodically monitor and/or audit use of the information systems and other record-keeping systems at a vendor location or a State location in an effort to ensure compliance with this policy. In addition, the State may audit, and require strengthening of, vendor policies and/or practices as they impact security of State data within the vendor's possession.

4.3.5 Any collection, use or disclosure of information that is determined by the Agency to be contrary to the confidentiality statement, law or Agency policy may result in termination of the underlying contract.

4.3.6 The confidentiality and incident response accountability statement contained within the RFP or RFQ, as applicable, and the Purchase Order shall survive termination of the underlying contract.

4.4 If there is an incident that involves theft, loss, or compromise of State Confidential Information, the following reporting and/or actions must be taken by the vendor, on its own behalf, or on behalf of its subcontractor:

4.4.1 If the event involves a theft, or is incidental to another crime, appropriate law enforcement officials shall be notified and a police report generated to document the circumstances of the crime, with a goal to establish whether the crime involved a motive to obtain the sensitive data. A copy of the police report will be forwarded in accordance with 4.4.2.3.

4.4.2 Notification of Breach.

4.4.2.1 Upon the **discovery** of Breach of security of Confidential Information, if the Confidential Information was, or is reasonably believed to have been, acquired by an unauthorized person, the vendor shall notify the individuals identified in 4.4.2.3 immediately by telephone call plus e-mail, web form or fax; or,

4.4.2.2 Within 24 hours by e-mail or fax of any **suspected** Security Incident, intrusion or unauthorized use or disclosure of Confidential Information, in violation of the underlying contract and this Notice, of potential loss of confidential data affecting the underlying contract.

4.4.2.3 Notification required by the above two sections shall be provided to:

(1) the Agency contract manager whose contact information may be found at www.state.wv.us/admin/purchase/vrc/agencyli.htm and, (2) unless otherwise directed by the Agency in writing, the Office of Technology at incident@wv.gov.

4.4.2.4 The vendor shall immediately investigate such actual or suspected Security Incident, Breach, or unauthorized use or disclosure of Confidential Information. Within 72 hours of the discovery, if an actual Breach has occurred, the vendor shall notify the individuals identified in 4.4.2.3 of the following: (a) What data elements were involved and the extent of the data involved in the Breach (e.g. number of records or affected individual's data); (b) The identity of the unauthorized persons known or reasonably believed to have improperly used or disclosed PHI or Confidential Information; (c) A description of where the Confidential Information is believed to have been improperly transmitted, sent, or utilized; (d) A description of the probable causes of the improper use or disclosure; and (e) Whether any Federal or State laws requiring individual notifications of Breaches are triggered.

4.4.2.5 Agency will coordinate with the vendor to determine additional specific actions that will be required of the vendor for mitigation of the Breach, which may include notification to the individual or other authorities.

4.4.2.6 All associated costs shall be borne by the vendor. This may include, but not be limited to costs associated with notifying affected individuals.

4.5 The State may require that a vendor provide evidence of adequate background checks, including a nationwide record search, for individuals who are entrusted by the vendor to work with State information.

4.6 The State requires that any vendor taking possession of State data have comprehensive policies and practices to adequately safeguard that information, and further that the sensitivity of the information is clearly identified and documented in writing, with signed acknowledgement by the vendor that the sensitivity is understood, before it is conveyed to the vendor. Vendor policy should articulate all safeguards in place for the State information, including provisions for destruction of all data, including backup copies of the data, at the end of the vendor's legitimate need to possess the data. All State-owned media containing State information will be returned to the State when no longer legitimately needed by the vendor.

4.7 All vendor owned devices that contain or transport any State Confidential Information must be encrypted using the AES algorithm, and an industry

standard methodology. This includes desktop and laptop computers (whole drive encryption – not file encryption), personal digital assistants (PDA), smart phones, thumb or flash-type drives, CDs, diskettes, backup tapes, etc.

Exhibit C

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002 **Doc Description:** FLEET MANAGEMENT SYSTEM - 7021EC12 **Proc Type:** Central Master Agreement			**Reason for Modification:**
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-08-09	2021-09-02 13:30	CRFP 0803 DOT2200000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

THE STATE OF WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WEST VIRGINIA DIVISION OF HIGHWAYS, IS SOLICITING PROPOSALS FOR FLEET AND MATERIAL MANAGEMENT SYSTEM, PER THE ATTACHED DOCUMENTS.

QUESTIONS REGARDING THE SOLICITATION MUST BE SUBMITTED IN WRITING TO TARA.L.LYLE@WV.GOV PRIOR TO THE QUESTION PERIOD DEADLINE CONTAINED IN THE INSTRUCTIONS TO VENDORS SUBMITTING BIDS

ONLINE RESPONSES FOR THIS SOLICITATION ARE PROHIBITED

INVOICE TO	SHIP TO
DIVISION OF HIGHWAYS OFFICE OF THE SECRETARY 1900 KANAWHA BLVD E, BLDG 5 RM A109 CHARLESTON WV 25305-0440 US	DIVISION OF HIGHWAYS EXECUTIVE DIVISION 1900 KANAWHA BLVD E, BLDG 5 CHARLESTON WV 25305-0430 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	DEVELOPMENT IMPLEMENTATION SUPPORT FLEET MGT SYSTEM				

Comm Code	Manufacturer	Specification	Model #
43233701			

Extended Description:
SOFTWARE DEVELOPMENT, INSTALLATION, SUPPORT AND TRAINING

SEE ATTACHMENTS.

SCHEDULE OF EVENTS

Line	Event	Event Date

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

TABLE OF CONTENTS

1. **Table of Contents**
2. **Section 1: General Information and Instructions**
3. **Section 2: Instructions to Vendors Submitting Bids**
4. **Section 3: General Terms and Conditions**
5. **Section 4: Project Specifications**
6. **Section 5: Vendor Proposal**
7. **Section 6: Evaluation and Award**
8. **Certification and Signature Page**

SECTION 1: GENERAL INFORMATION

1.1. Introduction:

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code §5A-3-10b, for the Department of Transportation (hereinafter referred to as the "Agency") to provide commercial-off-the-shelf (COTS) software and integration services to implement a Fleet and Equipment Management System. The Agency is also seeking ongoing support services following the implementation of the system to production status.

The RFP is a procurement method in which vendors submit proposals in response to the request for proposal published by the Purchasing Division. It requires an award to the highest scoring vendor, rather than the lowest cost vendor, based upon a technical evaluation of the vendor's technical proposal and a cost evaluation. This is referred to as a best value procurement. Through their proposals, vendors offer a solution to the objectives, problem, or need specified in the RFP, and define how they intend to meet (or exceed) the RFP requirements.

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

SECTION 2: INSTRUCTIONS TO VENDORS SUBMITTING BIDS

Instructions begin on next page.

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. PREBID MEETING: The item identified below shall apply to this Solicitation.

☑ A pre-bid meeting will not be held prior to bid opening

☐ A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting

are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline:August 16, 2021 by 4:00 pm

Submit Questions to:Tara Lyle, Buyer Supervisor
2019 Washington Street, East
Charleston, WV 25305
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)
Email:Tara.L.Lyle@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:
BUYER:
SOLICITATION NO.:
BID OPENING DATE:
BID OPENING TIME:
FAX NUMBER:

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to a Request for Proposal is not permitted in wvOASIS.

For Request For Proposal ("RFP") Responses Only: In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal prior to the bid opening date and time identified in Section 7 below, plus two (2) convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should clearly identify and segregate the cost proposal from the technical proposal in a separately sealed envelope.

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: September 2, 2021 at 1:30 pm

Bid Opening Location: Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

10. ALTERNATE MODEL OR BRAND: Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

☐ This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

13. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the $125 fee, if applicable.

14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

15. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and must include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at: http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. Any request for reciprocal preference must include with the bid any information necessary to evaluate and confirm the applicability of the preference. A request form to help facilitate the request can be found at: http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference

for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

19. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform or lacks the integrity and reliability to assure good-faith performance."

20. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b."

21. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

22. INTERESTED PARTY DISCLOSURE: West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least $1 million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award.

A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

23. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

24. E-MAIL NOTIFICATION OF AWARD: The Purchasing Division will attempt to provide bidders with e-mail notification of contract award when a solicitation that the bidder participated in has been awarded. For notification purposes, bidders must provide the Purchasing Division with a valid email address in the bid response. Bidders may also monitor wvOASIS or the Purchasing Division's website to determine when a contract has been awarded.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

SECTION 4: PROJECT SPECIFICATIONS

4.1. Background and Current Operating Environment

WVDOT is seeking a Fleet and Equipment Management System solution to support the needs of the WVDOT Division of Highways (WVDOH) and the State Rail Authority (SRA).

WVDOH is the state agency responsible for managing the state highway system for the State of West Virginia. WVDOH is responsible for planning, engineering, right-of-way acquisition, construction, reconstruction, traffic regulation and maintenance of more than 35,000 miles of state roads. Additional duties include highway research, outdoor advertising contiguous to state roads, roadside development, safety and weight enforcement and dissemination of highway information. WVDOH is managed through divisions based in the central office in Charleston, West Virginia and 10 District offices located across the state.

WVDOH owns, operates and maintains their own vehicles along with highway construction and maintenance equipment. The WVDOH Equipment Division is located in Buckhannon, WV, with additional garage and repair facilities located across the State in each of WVDOH's ten (10) districts. Exhibit 1 provides an overview of WVDOH's fleet and equipment assets. WVDOT estimates 100 users for the Fleet and Equipment Management system located across the state.

EXHIBIT 1: SUMMARY OF WVDOH FLEET AND EQUIPMENT ASSETS

Equipment Type	Quantity
Passenger Cars	2,040
Single Axle Dump Trucks	730
Tandem Axle Dump Trucks	401
Graders	218
Excavators/Backhoes	179
Pavers	10

The WVDOT SRA is headquartered in Moorefield, WV. Among the responsibilities of SRA is the operation of South Branch Valley Railroad (SBVR). SBVR is a 52.4-mile route from Petersburg to Green Spring where the SBVR links to the CSXT mainline connecting Cumberland, MD to Martinsburg, WV. SRA's fleet of rail and work vehicles and equipment will be included within the new Fleet and Equipment Management solution. WVDOT estimates there will be approximately 10 SRA users of the new system.

WVDOT has an existing agency-level Equipment Management System which provides a broad range of fleet and equipment management functionality which is utilized by WVDOH and SRA. The necessary functionality can be broken up into Equipment Management, Preventative Maintenance, Repairs, and Fuel Tracking.

The current WVDOT Equipment Management System is a custom developed mainframe-based legacy application. Along with WVDOT's other legacy administrative systems, these applications have been designed to be tightly integrated to support WVDOT operations, where they interface with the wvOASIS ERP system to support accounts payable processing and the transfer of summary-level financial information to wvOASIS. The WVDOT timekeeping application also interfaces to wvOASIS for payroll processing at the detail level.

The existing WVDOT administrative systems are approximately 35 years old. These systems are primarily written in the CICS/COBOL (Customer Information Control System / Common Business Oriented Language) Programming computer languages using VSAM (Virtual Storage Access Method) as the file structure. Some additional subsystems have also been developed utilizing SAS business analysis software. These systems primarily execute in the mainframe environment operated by the WV Office of Technology (WVOT).

The existing WVDOT core administrative systems have several limitations. These include:

- Increased risk associated with hardware and software being operated well beyond their technically designed lifecycle, are reaching end of support and are technically and functionally obsolete;
- Limitations in the functionality of the parts inventory system complicate WVDOT's management of its equipment and fleet valued at approximately $336 million;
- Inability to interface WVDOT's current systems with Internet applications creating difficulties in the timely reporting of or providing access to information desired by policymakers, other stakeholders, and the citizens of West Virginia; and
- Most of the WVDOT staff knowledgeable about these systems may be eligible to retire from WVDOT service within the next five years.

To support WVDOT's fleet and equipment operations, the new Fleet and Equipment Management System (hereafter referred to as the Vendor's Proposed System or VPS) shall provide asset inventory/registry, work management, warranty management, planning and budgeting, modeling and analytics and management reporting capabilities in support of WVDOT fleet management operations. The new VPS will also adhere to various application and technical architecture standards and specifications.

4.2. Project Goals and Mandatory Requirements

WVDOT is currently engaged in a multi-year initiative to transform its legacy financial, administrative, project and program management, work management and asset management systems to a next generation set of highly integrated management systems. As part of the statewide implementation of the wvOASIS Enterprise Resource Planning (ERP) program, WVDOT implemented CGI Advantage Financials in October 2018 as the agency's financial system of record. WVDOT is now engaged in implementing a number of other new system components which taken together will create a state-of-the-art Transportation Management System which is designed to either integrate or interface with the State of West Virginia's wvOASIS ERP environment.

WVDOT is currently implementing HUB, a new program and project management system which will be tightly integrated with wvOASIS and the CGI HRM Time and Leave module for time and leave management. WVDOT is also preparing to initiate an extension of its existing Deighton dTIMS solution

which currently supports bridge and pavement assets to provide asset inventory functionality for most transportation assets and to integrate this asset inventory with Deighton's Operations Management System module to provide maintenance management and other work management functionality for facilities and linear assets.

Another key element of the envisioned WVDOT Transportation Management System is a Fleet and Equipment Management System which supports WVDOT's implementation of fleet management best practices. The primary purpose of this Request for Proposals (RFP) is to obtain a commercial-off-the-shelf fleet management system to manage the department's fleet and equipment assets; implementation services to deploy the proposed fleet management system to production status; and post implementation support services. The new Fleet and Equipment Management System will integrate with wvOASIS as the fixed asset system of record for the State and to provide equipment cost information as required for cost capture for State and federal projects and to support billing for federal reimbursement which is performed in wvOASIS.

In parallel with the implementation of a new Fleet and Equipment Management system, WVDOT will be implementing the Consumable Inventory module within wvOASIS to support the agency's consumable inventory requirements. The Vendor's proposed fleet and equipment management system will be expected to integrate with the wvOASIS consumable inventory module to support materials management requirements for the WVDOH and SRA fleet management operations.

WVDOT is open to implementing the Fleet and Equipment Management System) either on-premise at the State of West Virginia Data Center in which the software is acquired in a traditional software licensing model or in a Software as a Service (SaaS) model in which the system runs in a data center managed by the Vendor or a third-party provider under subcontract to the Vendor.

The Vendor should describe its approach and methodology to providing the service or solving the problem defined by the goals/objectives identified below. The Vendor's response should include technical information about how the proposed approach compares and contrasts to other possible approaches.

4.2.1. Goals and Objectives – The project goals and objectives are listed below.

4.2.1.1. Vendor's proposal should provide an architectural design based on the capacity and storage requirements listing in this RFP. The proposal should include a description of the methodology that will be utilized to size, plan, and execute the implementation of a turnkey solution.

4.2.1.2. Vendor's proposal should outline all software and hardware components required to meet the mandatory requirements. The proposal should identify any features/functionality that exceed the mandatory requirements. The proposal must contain technical documentation on each component in the proposed solution. This documentation will allow for a comprehensive evaluation.

4.2.1.3. Vendor should describe the process for deploying the components outlined in the proposal and should address a recommended approach for the migration of existing data and services.

4.2.1.4. Vendor should describe the VPS technical support and maintenance needs along with their staff capability to support them and include a detailed plan for hardware/software support and knowledge transfer, installation, ongoing support, and training.

4.2.1.5. The proposed solution should be compatible with the State of West Virginia software standards and security policies. The solution should be compatible with Google Workspace products (the State is currently transitioning from Microsoft Office to Google Workspace) and the State of West Virginia's acceptable use policy. These policies are located at: https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx.

4.2.1.6. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Fleet Equipment Scheduled Maintenance process as follows:

- Facilitate the configuration of Preventive Maintenance criteria, which will trigger preventive maintenance activities and notify owners about preventive maintenance due activities for equipment and vehicles.
- Facilitate in-house repair orders and work reporting in the system.
- Keep all preventive maintenance repair history updated.
- Record and track commercial preventive maintenance repairs performed by a third party through either entry of the work performed into the system or importing of information provided by the third party who performed the work.
- Facilitate the management of specific, hierarchal preventive maintenance scheduling.

4.2.1.7. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Equipment Repair business process as follows:

- Facilitate in-house repair orders and work reporting in the system.
- Support importing of commercial repair data for work performed by a third party.
- Keep all repair history up to date.

4.2.1.8. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Fueling process as follows:

- Accurately track the fuel usage and cost history of all State-owned equipment and vehicles by vehicle.
- Track all types of fueling transactions including automated bulk fueling transactions (currently tracked using the Fuel Master system), commercial fuel cards, and manual fueling transactions.
- Provide for the billing of fuel issues to other State Agencies.

4.2.1.9. Vendor's proposed solution should support WVDOT in managing the full asset lifecycle and in prioritizing assets for replacement as follows:

- Support managing of fleet and equipment cost allocation and in conjunction with wvOASIS support billing for equipment usage.
- Plan for retirement/replacement of equipment and the acquisition of equipment.
- Manage asset ownership assignments and transfers during the lifecycle of the assets.

- Manage disposal/retirement of equipment in conjunction with the wvOASIS fixed assets module.

4.2.2. Mandatory Project Requirements

The following mandatory requirements relate to the goals and objectives and must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it will comply with the mandatory requirements and include any areas where its proposed solution exceeds the mandatory requirement. Failure to comply with mandatory requirements will lead to disqualification, but the approach/methodology that the vendor uses to comply, and areas where the mandatory requirements are exceeded, will be included in technical scores where appropriate. The terms "must," "will," "shall," "minimum," "maximum," or "is/are required" identify a mandatory item or factor. However, use of the terms "must," "will," "shall," "minimum," "maximum," or "is/are required" in the requirements matrices in Attachment A indicates that such items are expected, but failure to comply with the provisions in the requirements matrices utilizing the above-mentioned terms will not result in automatic disqualification of the proposal. Decisions regarding compliance with any mandatory requirements shall be at the sole discretion of the WVDOT. The mandatory project requirements are listed below.

4.2.2.1.Single Vendor to Execute the Contract

WVDOT is seeking proposals from Vendors who have the technical/functional experience and a proven track record in configuration, design, testing, implementation and integration of its proposed commercial off-the-shelf Fleet and Equipment Management solution. The Vendor shall demonstrate an understanding of the fleet and equipment management business areas and should demonstrate experience in implementing its proposed Fleet and Equipment Management solution for organizations similar to WVDOT in size and scope (for example state transportation agencies (preferred), large public works agencies, state fleet agencies, and other organizations with significant fleet management operations including transit, rail, airport, seaport, facilities construction, water or power utilities, mining, etc.).

The WVDOT is seeking a single Vendor that shall be responsible for providing both a complete software solution and all requested services required for a successful implementation, including production support. The Vendor may team with multiple firms in its proposal, but there shall be a single primary Vendor that will execute the systems integration contract expected to result from this RFP and will coordinate, integrate, and be accountable for all products and services proposed. This excludes a joint venture arrangement between vendors or joint response to this RFP as such arrangements will not be allowed. This restriction does not prohibit multiple vendors from proposing the same subcontractor(s) or software as a part of their proposals using a primary vendor as described previously.

One award to a single prime Vendor is anticipated under this solicitation. Based on this one award, however, WVDOT anticipates potentially executing multiple agreements including but not limited to:

- Systems integration contract with the prime contractor for implementation and postproduction support services; and
- Software licensing and maintenance agreements with one or more software solution provider(s) proposed by the selected prime Vendor. The cost of the software license and applicable software maintenance for the duration of the implementation project effort may be invoiced through the selected prime Vendor. However, because the Fleet and Equipment Management software providers

will be long term business partners of WVDOT, it is important for WVDOT to initiate the contract relationship with the software providers at the start of the project.

4.2.2.2. Project Location and On-site Work

On-site work during the implementation project will be performed as required at WVDOT Headquarters in Charleston, WV; the WVDOH Equipment Division Headquarters in Buchannan, WV; the State Rail Authority offices in Moorefield, WV; and as required at WVDOH District offices and other WVDOT locations across the State of West Virginia. It is expected that the Vendor will work on-site for those project activities requiring extensive user interaction such as requirements confirmation, training the core project team on the VPS, user acceptance testing, train-the-trainer, etc. However, the ability to perform on-site work will be subject to the prevailing COVID-19 or similar r health related emergency protocols and Federal, State, and local regulations in place at the time of the Contract start. WVDOT will work with the selected Vendor to make any adjustments to the project approach which may be required based on the health protocols in place at the time of Contract Award.

At this time, the Transportation Management Project Team which will be overseeing this project is located at 1900 Kanawha Blvd. East, Building 5, 4th Floor, Charleston, WV 25305.

4.2.2.3. Fleet and Equipment Management Functional Requirements

The VPS shall support short-term and long-term maintenance planning, including scheduling work orders, projecting resource requirements (labor, material, etc.), and highlighting labor, parts, or capacity shortages or excesses. In addition, the system shall be fully integrated with the Consumable Inventory module in wvOASIS. The key capabilities required of the VPS are described in further detail below.

4.2.2.3.1. Asset Inventory/Asset Registry

Asset Inventory/Asset Registry capabilities shall support entry, tracking, and management of all types of fleet and equipment units in a single enterprise inventory including, but not limited to passenger vehicles; light duty trucks; maintenance and construction equipment; specialty tools and equipment; West Virginia State Rail Authority rolling stock and work equipment and other fleet classes/types as WVDOT may acquire. Asset Inventory/Asset Registry functionality shall include:

- **Asset Inventory**: Uniquely identify and define each WVDOT fleet or equipment asset in a Fleet and Equipment asset inventory and store asset attribute and reference information for each asset.
- **Leasing and Financing**: Store lease/rental information for any fleet units which are leased by WVDOT, integrate with the State of West Virginia wvOASIS Advantage Financials accounts payable function to automatically generate payment request for monthly or other recurring payments for leased or financed vehicles, and store financing information.
- **Licenses and Permits**: Store and track annual registration/license/permit/emission renewals for vehicles and other motorized equipment separate from preventive maintenance services including registration/license/permit type, date of expiration and renewal and associated fees.
- **Service Call and Incident Tracking:** Capture and track information on incidents involving WVDOT fleet and equipment assets. Incidents can include accidents or other vandalism, tire blowouts, any non-accident related item that could lead to a work order or log a work request.

- **AVL Integration:** Provide the capability to integrate with CAD AVL equipment and system(s) to allow for viewing vehicle activity history including operator, activity, location and date and time of activity.
- **Fuel Management:** Maintain inventory of fuel cards and track various other fuel management attributes including fuel type (account for gas, diesel, CNG, electric, multiple fuel types and capacities), equipment information such as operator, vehicle, etc., tank capacity, and fuel card expiration dates. Support integration with Fuel Master to track fuel usage by each fleet and equipment asset.
- **Work Management Integration:** Integrate with the work management functions and the wvOASIS Advantage Financials application to obtain vehicle and equipment usage information entered by WVDOT staff on work orders and update the vehicle inventory information with the mileage or hours utilized as appropriate.
- **Tire Management:** Maintain reference information specific to tires for each tire, including equipment tire is installed, brand, model, type, dimensions, lifecycle tread usage cumulative across installed equipment, etc.
- **Availability, Usage and Downtime:** Automatically update and track the real-time status and availability for service for all assets.
- **Motor Pool:** Set-up and manage one or more motor pools. The system should provide reservation functionality and/or provide the ability to integrate with a reservation system and a telematics solution as well as integration with the wvOASIS ERP to track and manage usage and cost information for reservations to state staff external to the owning department staff.
- **Maintenance History:** Maintain operating and maintenance history detail for all assets.
- **Performance Analysis:** Support defining and tracking asset performance and performing analysis relating to all information available in the system.
- **Acquisition, Replacement and Surplus:** Track detailed information on the acquisition and replacement of both purchased and constructed assets.
- **Fleet and Asset Planning**: Define parameters for long term fleet planning projections such as specific series and models of vehicles, number of vehicles in each series, planned maintenance jobs for vehicles and assets including standard labor hours and maintenance frequency, etc.
- **Costing and Billing:** Support allocation of vehicle operating cost to projects, grants and overhead accounts.

4.2.2.3.2. Work Management

The Work Management function shall provide a work planning and management solution that will support the identification of potential issues through a work request process and the planning, scheduling, management and tracking of various maintenance management activities performed by WVDOT on the range of fleet and equipment asset classes. Work management capabilities shall include:

- **Problem Reporting**: Provide an Intranet based capability for an employee to report issues related to fleet and equipment assets.

- **Reporting and Managing Problems, Work Requests:** Automatically generate work requests (problem reports/defects) if usage, meter readings, and other condition measurements deviate from pre-defined tolerances for an asset or if a pre-defined event occurs; manually generate work requests from manual sources such as defects found during preventive maintenance, operator vehicle condition reports. Work Orders are created from Work Requests if the request is approved.
- **Planned/Preventive Maintenance Program Management:** Define and maintain a Planned / Preventive Maintenance program for each fleet and equipment asset and/or sub-assets asset types, asset model, class or series using a library of standard preventive maintenance job templates for jobs included in the preventive maintenance program with defined intervals for performing each job. If the preventive maintenance is required by external directive, provide indication on the preventive maintenance work order of the originating source (local, state, federal agency). Provide comprehensive and detailed history of asset usage, maintenance, performance and cost to support effective asset management throughout the entire asset life cycle.
- **Major Overhauls, Asset Rehab and Campaigns:** Provide the capability to define and track major maintenance programs (e.g., overhauls) consisting of a series of maintenance jobs to be completed for a single asset, or specific asset groupings, models or series, or location performed on user defined scheduling criteria. As with regular maintenance, WVDOT requires complete and detailed tracking of the actual work performed, costs, and resources consumed for each action performed on each asset.
- **Maintenance Standard Job Definition:** Define standard maintenance job templates to predefine a specific scope of work for specific asset classes or asset types, including the specification of a job code, labor hours, skills, materials, and equipment needed to perform a job.
- **Maintenance Resource Definition:** Define specific maintenance locations, shops, and facilities and a list of maintenance work to be performed at each facility; indicate the specific assets maintained at each facility and the equipment at the location as well as the labor resources available by labor classification.
- **Work Order Planning:** Define maintenance work and resource requirements, schedule and assign work and resources, monitor work in process, capture information on work activity, and record work results, including time and costs. Manage maintenance resources including WVDOT and contractor personnel, facilities, materials, and tools. Provide the ability to plan, monitor, and forecast annual work quantities and required resources (labor, equipment, material, and budget) for fleet and equipment assets at a program level.
- **Work Order Description:** Identify the fleet and equipment asset to which the work applies. Provide the ability to attach/access/retrieve standard asset documentation from the work order, including drawings, maintenance manuals, etc. Identify the reason for the work order, define the work to be done and the labor resources required, etc.
- **Work Order Creation:** Provide the capability to create work orders using several methods – on demand, from templates, from defects found during a preventive maintenance activity, as the result of an incident, from a warranty failure, recall or service bulletin, etc.

- **Work Activity Recording:** Provide the capability for multiple individuals to work on multiple assets on a single work order and link specific work jobs or steps to a specific asset. Provide a method of allocating labor and material cost accurately to specific assets, with the cost then interfaced back to wvOASIS. Provide the capability to designate a work order as a service/road call, or link a work order to a service/road call/incident event and to record travel time, service information (route, run, operator), road conditions, etc. Provide detailed description, classification, and reporting of asset failures by asset type, component, and system. Allow the ability to match repair codes to the reported failure. Support various maintenance failure analysis methods for developing asset/part modifications/replacements, adjustments to planned maintenance programs, and other actions to support continuous improvement of asset reliability and performance.
- **Work Activity Timekeeping:** Provide the capability to integrate with wvOASIS Advantage Financials and Human Resource Management (HRM) to capture and track the actual time and associated labor cost attributed to a work order.
- **Work Order Tracking and Monitoring:** Provide real-time monitoring of work order status and provide information required to manage and adjust work as required, including the estimated time remaining on the work order (planned or estimated time less elapsed time). Other information may include but is not limited to percent complete based on the projected time to complete remaining tasks, current task or step being performed and the employee(s) currently assigned, number of tasks completed and percentage, hours accumulated against each task, projected completion date/time, percent ahead or behind schedule based on actual labor versus standard for the job tasks or steps completed, accumulated cost detail, and current work order status.
- **Work Order Closeout:** Automatically calculate total work order costs and update asset maintenance history upon closing a work order.
- **Component Rebuild Management:** Provide support to track components through the entire repair and rebuild cycle and maintain component operating and maintenance history. Provide the capability to manage and track the status, movement, and history of serialized components. Provide the capability to define major components, sub-components, assemblies and sub-assemblies that will be individually tracked by serial number, or another unique ID.
- **Handheld/Mobile/Tablet Devices:** Provide support for work orders from handheld/mobile devices (create and perform).
- **Management of Contractors:** Manage inspection, maintenance, and work contracted out to a vendor or contractor; capture work details and cost. Monitor actual vendor or contractor performance versus service-level targets. Track performed warranty work for reimbursement. Manage repair and return of rebuilt assets, which requires the tracking of serialized components sent for repair (either the return of the same item or a replacement).
- **Workforce Management:** Integrate with the wvOASIS Advantage HRM module to obtain employee information including status, vacations, training and certification information. Store basic information on workforce records, including job title, home location, job function, supervisor/shift, name, address, union affiliation, certifications, skills, all assigned assets including phones, cars, and uniforms, etc. Track training requirements.

- **Costing and Billing**: Integrate with wvOASIS Advantage Financials to obtain the required actual cost data. Accumulate comprehensive maintenance costs by asset, type of work, and other breakdowns for the purpose of providing input to capital and operating budgets, maintenance cost analysis, repair or replace decisions, internal versus external maintenance decisions, etc.

4.2.2.3.3. Warranty Management

The VPS shall identify asset, component, and parts warranties. The system should define warranty terms and conditions, and vendor or contractor responsibility for warranty service. The VPS should highlight work under warranty, identify and file warranty claims, and track warranty service and reimbursements. Warranty functionality shall include:

- **Work Management:** Automatically generate and track warranty claims from the work order system based on user-defined business rules including what are warrantable repairs versus maintenance items and repairs not covered.
- **Claims:** Generate and track warranty claims from the work order system including claim number and date, vehicle/asset/component, original cost (if applicable), RMA, repair cost, claim amount, text descriptions or notes, claim status (user defined categories), claim disposition and date, actual recovery amount or value received by WVDOT, type of disposition (e.g., reimbursement, replacement part, credit toward future purchases, etc.), comments, etc.
- **Payments/Reimbursements**: Track warranty work performed by external contractors and vendors and automatically create claims for reimbursement if appropriate. Provide the ability to credit an asset or inventory based on reimbursement or other credit received in response to a warranty claim, to receive a replacement part or component into inventory at no cost, to track a credit against future purchases from the vendor, or to record vendor repairs under warranty for asset history.

4.2.2.3.4. Planning and Budgeting

The VPS shall provide support for capital planning based on asset condition, criticality, performance, or other criteria and plan for and identify funding needs and sources. Planning and budgeting functionality should include:

- **Performance Standards:** Create and maintain performance guidelines based on user-defined business rules for all work management activities.
- **Operating Budget Development:** Generate annual budgetary plans utilizing existing asset data and standard work order templates to project labor and material needs.
- **Operating and Maintenance History, Performance Analysis, and Costs:** Maintain operating and maintenance history detail for all assets including problems posted, fuel/power and fluids consumption and operating costs, maintenance/rebuild work order detail, warranty claims, etc. Record and track the source and category of funds used for acquisition, operations and maintenance of a particular asset.
- **Long Term Maintenance Resource and Fleet/Asset Planning:** Forecast asset disposal/retirement based on user-defined criteria, such as mileage and/or other metrics, for user-defined time periods.
- **Capital Programming:** Provide support for long term forecasting of capital needs.

4.2.2.3.5. System Integrations/Interfaces

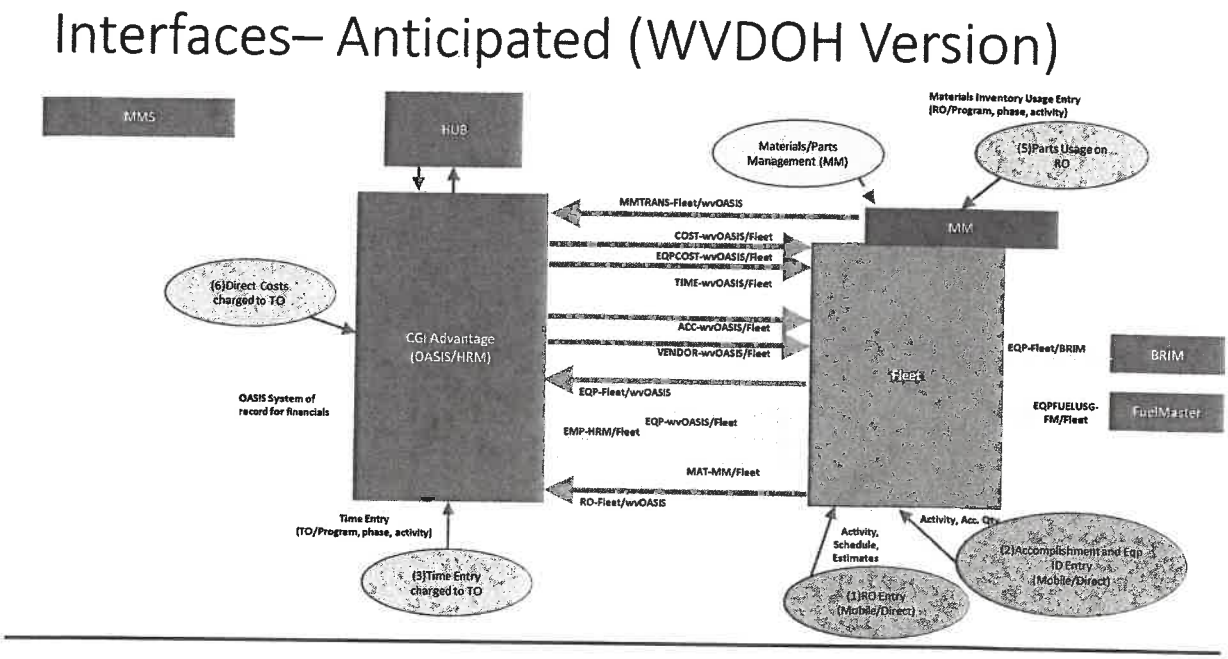
Several interfaces will have to be designed and developed to support WVDOT's Fleet and Equipment management functionality. These interfaces include but are not limited to:

- An interface with wvOASIS Advantage Financials Procurement module to initiate purchase requisitions in wvOASIS based on asset planning performed in the Fleet Management system;
- An interface with wvOASIS Advantage Financials Procurement and Fixed Assets module upon receipt and initiation of commissioning of the new fleet or equipment asset. The fleet and equipment asset record will be initially created in wvOASIS as the system of record for State of West Virginia assets and then interfaced to the Fleet Management System to create the fleet record in the VPS and allow WVDOT to enter additional information about the fleet/equipment asset beyond that maintained in wvOASIS;
- An interface with the West Virginia Board of Risk and Insurance Management (BRIM) to provide vehicle information for risk management and insurance;
- An interface with wvOASIS Advantage Financials and Human Resource Management to support set-up of repair orders as task orders in Advantage to allow employees to charge time to repair orders in Advantage Human Resource Management (HRM);
- An interface with wvOASIS Advantage Financials to receive actual hours and labor costs for each repair order/task order back when payroll is processed;
- An interface with wvOASIS Advantage Financials to obtain vehicle and equipment usage information entered by WVDOT staff as part of time reporting in Advantage Human Resource Management (HRM);
- A two-way interface with the Inventory module within wvOASIS Advantage Financials to support tracking of inventory activity related to Fleet and Equipment operations (charge outs to a repair order, returns to inventory when a repair order closed out, etc.);
- Two-way interface with Fuel Master application for fuel usage; and
- Two-way interface with DOA Fleet Management Office for leased passenger equipment.

Exhibit 2 below depicts the envisioned integration between the new Fleet and Equipment Management system and the rest of the wvOASIS ERP environment.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

EXHIBIT 2: PROPOSED TO-BE INTEGRATION ARCHITECTURE FOR NEW WVDOT FLEET MANAGEMENT SYSTEM



4.2.2.3.6. Modeling and Analytics

The VPS shall:

- Capture asset-related costs throughout the entire life cycle of the fleet and equipment asset from commissioning through disposal;
- Allocate costs to individual assets and aggregate costs for various asset groupings, including models, types, classes and subclasses; and
- Provide for the use of alternatives identification procedures, level-of-service criteria, maintenance cost minimization, and multi-period optimization within the modeling and analytics functions.

4.2.2.3.7. Management and Reporting

The VPS shall provide a range of standard pre-defined reports that are available using role-based access, support integration with leading third-party reporting tools and incorporate an ad-hoc query capability within the proposed software solution.

4.2.2.3.8. Technical Specifications

WVDOT is open to proposals for deploying the new VPS using either an on-premise implementation in a State Data Center or in a Software as a Service (SaaS)/Cloud model in a Vendor hosted environment. The VPS architecture and infrastructure shall be consistent providing a unified approach and user experience throughout the solution proposed.

Application Architecture

The VPS application architecture shall provide a consistent set of general system features and functions which occur across all business functions within the VPS application, These general system features and functions include a consistent user interface, workflow design and development capabilities, self-service functionality, capability to integrate with document management solutions, capabilities to integrate with the WVDOT GIS environment, capability to integrate with computer aided dispatch and automated vehicle locating (AVL) technology, mobile technology capability, security, archiving, audit trails and online help functionality.

Technical Architecture

The VPS technical architecture shall provide tools to allow for enterprise application integration and data integration with other State of West Virginia systems including extract, transform and load (ETL) tools and/or the capability to use third party tools for this purpose, The VPS shall also provide various system management tools or integrate with appropriate third party tools necessary to manage the operation of the VPS solution, The VPS shall provide for highly reliability and provide system performance and support for business continuity consistent with the performance standards in Attachment 1. The system design of the core VPS software and any customizations shall be implemented so as to provide for long-term supportability.

4.2.2.4. Federal Highway Administration Certification

Under federal law, state transportation departments are expected to successfully complete a comprehensive testing of the capabilities of a new financial management system which generates billings for reimbursement to the Federal Highway Administration (FHWA) prior to implementation. This ensures that the new system will allow the state transportation department to satisfy the primary elements of the Federal-Aid Highway Program (FAHP). This includes testing of transaction flows from and integration points with downstream systems which may integrate with the financial management system. The Fleet and Equipment Management System may be considered downstream touch point systems. As such, the Vendor will be expected to assist WVDOT as required in planning for and executing any required testing with FHWA representatives.

FHWA is concerned with a state's ability to plan/track federal-aid projects from conception to completion, and the sufficiency of accounting controls to properly manage federal funds overall and those obligated on specific projects. The ability to bill FHWA along with the validity of cost data for which FHWA is being billed will be a primary focus. Even though the current wvOASIS billing system has already passed the FHWA certification, FHWA reserves the right to review and audit the source of asset information for which they participate in the reimbursement of costs. To this extent, the Vendor must be able to assist WVDOT in demonstrating how the Fleet and Equipment Management System provides any project related cost information to wvOASIS.

When necessary, a system demonstration and related site visit by FHWA review team members will generally take three (3) full business days; but may take up to five (5) full business days.

Adequate time will be scheduled for proper planning, coordination among team members, review of system documentation, testing, and analysis. Prior to implementing a new VPS, WVDOT must demonstrate the system capabilities by completing a test script through live use of the system (in a test environment) that covers the workflow for any transactions initiated in the VPS which are charged to a project.

The Vendor is expected to be responsible for ensuring that its proposed VPS supports the required functionality and for preparing the data and test environment for the FHWA system demonstration. In its proposal response, the Vendor should list projects in which it supported a successful FHWA demonstration or has obtained any other federal certifications. WVDOT staff must perform the demonstration scripts to the satisfaction of the FHWA reviewers. FHWA reserves the right to update or modify the system demonstration requirements at any time.

4.2.2.5.Services to be Provided Mandatory Requirements

The WVDOT requires that the Vendor provide a complete and comprehensive set of services that are expected to ensure project success.

Following is a high-level list of the implementation services that are expected; however, additional services may be required to ensure implementation success in accordance with the Vendor's proposed methodology:

- Project management supported by a detailed project work plan;
- Requirements confirmation and development;
- Development of a Concept of Operations (ConOps) for managing the fleet and equipment management business processes using the VPS and the interaction of these processes and the VPS with other systems. This ConOps will confirm and show data movement between the VPS and other State of West Virginia applications and databases;
- Technical architecture and infrastructure design;
- System analysis and business process design;
- Software configuration management and tracking;
- Customizations (including forms, custom reports, automated interfaces, software enhancements and modifications, and custom workflows);
- Security configuration;
- Data conversion;
- Testing;
- Training;
- Documentation;
- Knowledge transfer;
- Communications and change management;

- Deployment / Cutover plan and checklist(s);
- Deployment (roll-out) support;
- Infrastructure and implementation support; and
- Production software and infrastructure maintenance and support, including one major software upgrade.

The remainder of this Section of the RFP provides a detailed description of the services to be included in the proposal. These services are expected to be addressed in the Statement of Work between the WVDOT and the Vendor. The Vendor is expected to submit a proposed Statement of Work in the Technical Proposal in TAB 10 - Sample Statement of work. The detailed proposal submission requirements for implementation services are defined in the following subsections.

4.2.2.6.Project Management

The Vendor's proposed project management methodology is expected to be consistent with the West Virginia Office of Technology (WVOT) Project Management Methodology. This methodology closely follows the ***Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK™)***. Additional information on the WVOT Project Management Methodology may be found on WVOT's web site at http://www.wvot.gov/.

The Vendor shall describe its project management methodology and approach to managing the project consistent with the above methodology.

4.2.2.6.1. Project Manager

As part of this project, the Vendor shall appoint a Project Manager who will act as a single point of contact between WVDOT and the successful Vendor. Project management shall be a key responsibility of the Vendor, and a continuous function. The Project Manager shall be an employee of the prime Vendor and authorized to represent the Vendor in all matters related to the project. The Vendor's Project Manager assigned to the WVDOT project shall have the authority to make commitments and decisions that are binding on the Vendor and any subcontractors.

The Vendor's Project Manager is expected to have demonstrated prior experience as a project manager on at least two (2) projects of comparable size and scope and experience as a project manager, deputy project manager, or functional/technical team leader on at least one public sector implementation of the Vendor's proposed Fleet and Equipment Management software suite for an organization of comparable size to WVDOT (total annual expenditures of $1 billion and 5,000 employees). Additionally, the Vendor's Project Manager is expected to have general functional and process knowledge of the VPS in relation to fleet and equipment management processes.

The Vendor's Project Manager is expected to be accountable for all services and deliverables provided under the Contract resulting from this RFP. The Vendor's Project Manager shall work to ensure the on-time delivery and successful deployment of a functioning system that meets the WVDOT's requirements and the successful ongoing operation of the Fleet and Equipment Management System components. The Project Manager will be expected to dedicate a significant portion of their work time to this project during the system design, construction, testing and initial deployment phases of the project. This individual is expected to work onsite most of the time and shall function as the WVDOT's primary point of contact

with the Vendor. The Vendor's Project Manager will also be expected to be onsite during any FHWA meetings concerning WVDOT's certification. When not on the project site, the Project Manager shall be accessible by telephone/cell phone with a four (4) hour maximum response time. The Vendor's Project Manager is expected to respond to day-to-day problems, manage issues, provide status reports, participate in weekly status meetings, and manage personnel resources.

If the proposed Project Manager is to change during this contract, prior approval of the new Project Manager will be required by WVDOT. The WVDOT reserves the right to approve, disapprove, and request removal of the Vendor's Project Manager throughout the term of the Contract resulting from this RFP.

4.2.2.6.2. Project Work Plan

The successful Vendor must prepare and submit to WVDOT for approval within 20 days of NTP a **Project Management Plan (PMP)**, which shall describe the Vendor's project team organization and reporting relationships, key project staff and team member contact information, the Vendor's project delivery approach, project risks and the plan for managing those risks, as well as the Vendor's procedures for implementing, managing and controlling the overall project. The PMP shall be a collaborative and comprehensive plan for all of the work associated with the project including all work needed by State staff even if the work is solely the responsibility of WVDOT or other state agencies.

The Project Management Plan should be based on the Project Management Institute's Project Management Body of Knowledge (PMBOKTM). It shall address at a minimum:

- Solution descriptions;
- Solution objectives;
- Criteria for success;
- Assumptions and constraints;
- An overall organizational chart of the key project staff contributing to the management and delivery of the solution. This shall include the person responsible for leading the various subcomponents of the project;
- Resource plan for Vendor and WVDOT including delineation of expected staff loading and specific roles and responsibilities for each individual assigned to the project;
- Schedule management;
- Scope/change management;
- Cost/budget management;
- Document management;
- Project communications management; and
- Risk and issue management.

The Project Management Plan shall include as an attachment the initial Project Work Plan. The Project Work Plan shall be developed in Microsoft Project 2019®. The Project Work Plan shall include tasks to be performed by both the WVDOT and Vendor personnel. The following standards apply to the work plan:

- Project management activities shall be documented in the work plan;
- The work plan shall outline a plan for the entire project;
- The work plan shall include tasks, schedules, dependencies, critical paths, and responsible parties (both Vendor and WVDOT staff) assigned to each task;
- The work plan shall also outline where offshore resource assistance will be necessary (note that any use of offshore resources shall require specific WVDOT pre-approval and shall require development and implementation of an appropriate data protection plan approved by the WVOT security administrator);
- The work plan shall include all deliverables that support the Proposed Methodology and Approach;
- Estimated work effort, duration, start and end dates shall be shown for each task;
- Appropriate milestones shall be identified in the work plan to gauge the project's progress toward meeting desired target completion dates; and
- Any assumptions made in developing the work plan shall be included in this section.

The Vendor shall also provide a Staffing Plan that addresses each of the Vendor's project staff and the necessary WVDOT project staffing. The Staffing Plan shall show the plan of usage (days per month) on a monthly basis for each resource over the period of the project. The Staffing Plan shall be provided in Microsoft Excel® format.

During implementation, the Vendor's Project Manager will be responsible for monitoring and updating the project plan continuously and revising and developing further detail as appropriate. It is expected that the Vendor will provide highly qualified project management staff to manage the work planning effort and to maintain the Project Work Plan in Microsoft Project 2019®. The Vendor's Project Manager is expected to provide weekly status reports relative to the Project Plan to the WVDOT project leadership for the duration of the project.

4.2.2.6.3. Status Reporting

The Vendor shall describe its approach for project status reporting on milestones. The WVDOT requires bi-weekly status reports to be provided to reflect the major activities for the reporting period. As part of the Vendor's approach to status reporting, the WVDOT expects regular participation in bi-weekly status meetings with the WVDOT project team. WVDOT project management intends to use the status report to monitor project activity and detect potential problems or delays. The bi-weekly status report is expected to serve as the agenda for the status meetings.

Topics to be covered in the bi-weekly status report and reviewed at the bi-weekly status meetings include, but are not limited to:

- A listing of significant departures from the Project Work Plan with explanations of causes, effects on other areas, and strategies to achieve realignment;
- Changes to project objectives, scope, schedule, or budget;
- A listing of tasks completed since the last report;
- Tasks that were delayed and reasons for the delay, with expected revised completion date;
- Planned activities for the next scheduled period;
- Summary of major concerns, risks or issues encountered, proposed resolutions, and actual resolutions; and
- Any other topics that require attention from the WVDOT Project Manager.

4.2.2.6.4. Issue Resolution

The Vendor shall describe its approach to issue identification, tracking, and resolution. This discussion shall include the use of any tools or techniques that are integrated into configuration management, software change control, and the overall project management methodology. Topics to be addressed in this section of the Project Management Plan include:

- Issue identification;
- Issue tracking;
- Issue review and prioritization;
- Issue analysis;
- Issue resolution; and
- Issue escalation.

After award, the WVDOT and the Vendor shall agree on a protocol for collaboratively identifying, recording, tracking, and resolving implementation issues. This protocol is expected to address the topics above, responsible parties, and specific steps to be taken on issues or disputes arising during the implementation process.

4.2.2.6.5. Project Controls, Standards, and Procedures

The Vendor shall describe its project controls, standards, and procedures for all project tasks. These items are expected to be reviewed and approved by the WVDOT's project leadership. This requirement includes, but is not limited to:

- Managing project documentation – Vendor shall describe templates used (configuration, design specifications, test scenarios, change request, etc.); proposed cloud or shared project space, organization of project directories; naming conventions; and version control procedures;
- Meeting procedures—Vendor shall describe techniques to ensure that meetings are efficient, productive, and results are adequately documented;

- Development standards—Vendor shall describe standards and procedures for design specifications, review processes, unit testing, and other controls to ensure the quality and consistency of custom design and development;
- Software change control procedures—Vendor shall describe the procedures and/or automated tools that should be employed to ensure the integrity of programs and configuration settings developed to support the solution;
- Scope management—The Vendor shall describe its scope control processes to ensure that work is not performed on out-of-scope features, functions, or tasks until the WVDOT grants authorization in writing;
- Communications Management—The Vendor shall describe its project communication plan including the types, frequency, objective, sensitivity classification, and target audience for each communication;
- Development Standards Management—The Vendor shall describe its processes to verify and validate that all code, interfaces, forms, reports, workflow, and other deliverables are developed and implemented according to the agreed-upon standards; and
- Deliverable Management – The Vendor shall describe its processes to verify the content and expectations for each deliverable in a timely manner well in advance of material work being completed on the deliverable, how the deliverable will be developed and reviewed collaboratively and once determined to be complete, the procedures to submit and track the deliverable through acceptance.

4.2.2.6.6. Risk Management Plan and Procedures

The Vendor shall describe its approach to identifying, assessing, and communicating potential risks to the project, as well as identifying and managing actions to avoid, transfer, mitigate, and/or manage those risks. In addition, the Vendor shall include the provision of the appropriate methods, tools, and techniques for active and ongoing identification and assessment of project risks; development of risk avoidance, transfer, mitigation, or management strategies; and monitoring and reporting of risk status throughout the life of the project.

4.2.2.6.7. Communication and Cooperation

The Vendor is expected to communicate and cooperate with all parties involved in the project, as well as all stakeholders of the larger WVDOT Transportation Management System effort and the statewide wvOASIS ERP initiative. Vendor staff are expected to have excellent communication skills and conduct themselves professionally and courteously in all instances.

The Vendor is expected to maintain communication to ensure project success. Project plans developed by the Vendor must be reviewed and approved by the WVDOT prior to implementation. Communications between parties shall be performed through, but not limited to:

- Ad-hoc and regularly scheduled and ad hoc on-site or Web meetings;
- Conference calls;
- Email;

- Bi-weekly written status reports provided to the WVDOT by the Vendor; and
- Project Plans.

4.2.2.7.Work Products/Compliance with Standards

All work products, including documentation, are expected to conform to any standards provided by the WVDOT to the Vendor prior to execution of the contract resulting from this RFP. The documentation must be kept current by the Vendor and made available to the WVDOT in electronic format. All electronic media produced during the Contract, resulting from this RFP, is expected to be compatible with Microsoft Office 2016® software and equivalent Google Workspace Tools® except for the MS Project Schedule which shall be compatible with Microsoft Project 2019® software. Please note that the state is in the process of transitioning to the Google Workspace. The WVDOT reserves the right to change its office software suite and Vendor is expected to conform to the new standard within thirty (30) calendar days after receipt of written notice by the WVDOT. Additionally, the WVDOT reserves the right to change its policies, procedures, and standards, as well as make changes according to Federal or other regulations. The Vendor is expected to conform to any new directives and regulations within thirty (30) calendar days after receipt of written notice by the WVDOT. If complying with the new policies, procedures, or standards within the 30-day timeframe appears to be overly burdensome, then the Vendor may provide written notification to the WVDOT with a proposed alternative compliance date for review and discussion.

All work products, including but not limited to electronic media and/or hard copy documentation produced as a result of the Contract, become the property of WVDOT and shall not be published or reproduced without the written permission of WVDOT.

The Vendor represents and warrants that the performance of work and services performed under this RFP conform to the highest professional industry standards. In addition, all deliverables produced as a result of the tasks performed under this RFP are to follow the technical standards and procedures of the WVDOT and WVOT.

Deliverables:

- Documentation of Project Controls, Standards, and Procedures;
- Project Work Plan;
- Issue and Risk Log; and
- Project Management Documentation required by WVDOT.

4.2.2.8.Technical Architecture and Infrastructure Design

The Vendor shall support the following technical activities and scope for this project:

- Technical assistance if an on-premise model is proposed to assess the sizing and procurement of infrastructure hardware and systems software including an assessment of the WVDOT's current IT resources;
- Technical architecture and infrastructure design;

- Standard technical infrastructure configuration and change management methodology activities, procedures, tools, and templates and how Vendor manages these activities and leverages the tools and templates;
- Initial software installation to support design, configuration, and testing;
- Access for portals, mobile devices, and external users (such as public facing or internally facing portals and websites, contractors, third party users, etc.); and
- Structure and maintenance of planned database instances/environments. Minimally, the WVDOT believes that the following environments are expected to support the project implementation lifecycle:
  - Baseline (vanilla),
  - Sandbox,
  - Development,
  - System Test,
  - Training,
  - Acceptance Test,
  - Quality Assurance/Production Patch, and
  - Production;
- Standard methodology for developing a business continuity plan, continuity capabilities and high-availability infrastructure, as well as a detailed explanation of the related approach, activities, procedures, tools, and templates and how the Vendor manages these activities and leverages the tools and templates;
- Disaster recovery guidance and execution (if necessary) for the duration of the project in accordance with the WVDOT's disaster recovery plan;
- Performance tuning of databases, application servers, web servers, and other software and devices deployed as part of the proposed solution. This includes batch and online software tuning, as well as data conversion software tuning;
- Software upgrade methodology, as well as a detailed explanation of the related approach, activities, procedures, tools, and templates, and how the Vendor manages these activities and leverages the tools and templates;
- Based upon the business requirements, technical requirements, business continuity requirements, and volume metrics provided in this RFP, the Vendor shall provide a recommended hardware sizing and architecture aligned with the deployment approach (scaling the environment to optimize use and budget costs) that considers:
  - Initial hardware, if necessary, for configuration, design, and development,
  - Hardware for testing in a production equivalent environment,

- Complete hardware sizing and architecture to address environment for release updates, training, development, testing, and production with the test and production environments being equivalent or practically equivalent for testing purposes,
- Security administration, and
- How the proposed technical architecture design fits within the State's existing network security architecture, composed of unique logical areas separating development/test environments from production environments.

Deliverables:

- Technical Environment Design with staged timing and scalability consideration;
- Technical Environment Installation and Set-up;
- Installed Application Software;
- Installed Pre-Populated "User Sandbox"; and
- Installed Software Instances as Described.

4.2.2.9. Systems Analysis and Business Process Design

The Vendor shall describe its approach to analyzing the WVDOT's business requirements and demonstration of the VPS capabilities to satisfactorily meet the functional and technical requirements. The Vendor shall utilize a Conference Room Pilot, or prototype format, integrated with the system analysis and business process design. The Vendor shall conduct a formal fit/gap analysis documenting the disposition of each functional requirement and the resolution of identified gaps (e.g., customization, workaround, eliminate requirement).

The Vendor is expected to assist the WVDOT in identifying appropriate business process improvement opportunities inherent in the use of software best practices, documenting the desired changes, and planning and implementing the business process changes. The Vendor shall describe how the business process improvement efforts integrates with its approach to project communications and cultural change management, since many of the change management issues involve changes to the WVDOT's business processes.

Deliverables:

- Fit/Gap Analysis Documentation;
- Business Process Improvement Documentation;
- System Business Process Design Documentation; and
- Development Specification Documentation.

4.2.2.10. Software Configuration

The Vendor shall configure its VPS to meet the requirements provided in this RFP including Attachment A. The Vendor must work closely with WVDOT project management, team members, subject matter experts and technical personnel in meeting process, workflow, functional, technical, and security requirements via software configuration to the fullest extent possible. The Vendor must demonstrate the configured software during the project so that WVDOT personnel may review and approve it.

The Vendor shall describe in its proposal its approach and methodology to be used to configure the VPS in accordance with the new business process design. This section is expected to also describe:

- Tools and procedures available to aid in the software configuration process;
- Documentation provided to support the software configuration to create a configuration baseline and then track and manage all configuration changes from this baseline;
- Process for validating configuration against the WVDOT's documented requirements; and
- Process used to ensure effective knowledge transfer to WVDOT staff.

Deliverables:

- Configured Application Software; and
- Updated Documentation to Support Configuration.

4.2.2.11. Custom Development and Custom Objects

The WVDOT is committed to minimizing customization of the VPS. It is anticipated, however, that certain development work products may be necessary in order to properly meet the WVDOT's functional requirements.

The Vendor shall describe its approach to addressing the various types of customizations which may be developed and implemented during the implementation of the VPS as follows:

- Enhancements and modifications;
- Automated Interfaces;
- Custom forms;
- Custom reports; and
- Custom workflow configuration.

Though it is the WVDOT's desire to utilize a fixed price arrangement for the project, including all customization activities, consideration will be given to eliminating specific customizations from project scope if such elimination is validated after completion of the software design phase. If any customizations are eliminated as part of the process, then the cost associated with each eliminated customization will be applied to a contingency fund to be used as the WVDOT determines.

4.2.2.12. Enhancements and Modifications

The Vendor is expected to describe its approach to making enhancements or modifications to the baseline software solution in a manner that facilitates an easy, low-cost, and low-risk migration to new releases of the baseline product. The Vendor shall describe its approach to coding and documenting modifications in such a way as to ensure that they can be easily reapplied when the WVDOT upgrades to new releases of the VPS. The Vendor shall also include its business-justification process for prioritizing and approving each of the identified potential enhancements.

While the WVDOT intends to minimize modifications made to the software to the extent possible, it is expected that some modifications may be required. Once proposed modifications are identified through the fit/gap analysis process, the Vendor must work with the appropriate WVDOT business analyst(s) to prepare a high-level design document with cost estimates for review and approval by WVDOT project leadership. Upon approval, the Vendor must produce the detailed technical design and develop the modification. The Vendor will be responsible for the functional and technical designs, coding, unit testing, integration testing, and knowledge transfer associated with all modifications in accordance with agreed upon standards. All modifications must be documented in such a way as to ensure that they can be easily migrated when the WVDOT upgrades to new releases of the proposed software.

Vendors are requested to provide a description of the potential customizations they believe will be necessary to address the needs of the WVDOT based on their prior experience with state departments of transportation and other state government agencies. Any assumptions associated with potential customizations shall be provided as well.

In completing the responses to each of the WVDOT's Fleet and Equipment Management System requirements, Vendors are expected to indicate each requirement where a customization is required, identify the complexity of the customization (High, Medium, or Low) and to provide supporting comments as to why a customization is needed to meet that requirement. Vendors are then expected to list the customizations and the estimated cost for each customization in the Enhancements and Modifications Schedule of the Vendor's Cost Proposal. Vendors are requested to provide candid feedback regarding the potential work effort and associated costs of Enhancements and Modifications.

4.2.2.13. Automated Interfaces

The responsibilities of the Vendor and the WVDOT for developing automated interfaces are outlined below.

Vendor Responsibilities

Work effort to be provided by the Vendor is expected to include, but not be limited to:

- Managing all activities related to interfacing data with the new VPS including the coordination of agency interface development efforts;
- Developing a detailed data interface plan document;
- Developing programming specifications;
- Coding of interface programs that transform and load data to or export data from the new VPS in accordance with program specifications;
- Performing unit testing of the interface programs developed by the Vendor;

- Providing a method to validate and resolve interface issues and data records on an individual or group basis;
- Developing reports and other means for WVDOT personnel to audit the interfaces; and
- System, integration and acceptance testing of interfaces.

The Vendor must provide a comprehensive Interface Plan that defines all the fundamental concepts and activities related to interfacing between the VPS and other WVDOT or State of West Virginia systems. The document is expected to at least address the following:

- The assumptions made when developing the Interface Plan;
- The analysis methodology used to develop Interface Plan;
- Opportunities for consolidation or integration; for example, recommendations for additional modules and/or configurations, retiring interfaces that supply data which can be retrieved from the VPS by other means e.g., data downloads;
- Revised interfacing requirements based on the mutually agreed upon implementation strategy;
- A detailed interface architecture specifying methods of communication, tools, formats, protocols, adapters, and control reports to ensure the operational integrity of the interfaces (e.g., control totals, record counts, etc.);
- Identification of risks with mitigation strategies;
- A knowledge transfer plan that identifies the deliverables for which knowledge transfer is expected to take place and the skill sets required by participating WVDOT employees;
- An error correction methodology for rejected interface data that ensures that data is not "lost" for example an on-line suspense file;
- Definition of the formats and protocols that should be observed between ETL (Extract, Transform, Load process – Database functions combined in one tool to pull data from one database and place it into another) components for example Comma Separated Value (.csv) or Extensible Markup Language (XML);
- Audit controls that are expected to be built into the interface processing to ensure completeness and accuracy of transferred data;
- Standards for transactions to/from other WVDOT or State systems and for all temporary interfaces to/from existing systems required as a result of the proposed deployment approach; and
- Communication and coordination methodology to be used with WDOT staff, other state agencies and external entities.

The Vendor is responsible for providing all required and temporary interfaces either as a fully documented out-of-the-box component of the VPS or by providing the following services associated with development of the required interfaces:

- Interface design including unit test cases;
- Interface development including software modifications;
- Testing; and
- Development of any procedures to support interfacing system operations that are not delivered as part of the baseline product.

The Vendor is responsible for providing an acceptable solution to all identified interfaces, including those identified as tentative, either as a fully documented out-of-the-box component of the VPS or by providing additional development required to support the proposed solution. The Vendor must provide a business needs assessment of each potential interface that identifies at least one acceptable solution and if software development is expected, provide:

- Designs including unit test cases,
- Development including software modifications,
- Testing, and
- Development of any procedures to support system operations that are not delivered as part of the baseline product.

WVDOT Responsibilities

The WVDOT is expected to be responsible for subject matter knowledge of existing interfaces and associated data or for coordinating with and making available staff with other state agencies as required. WVDOT subject matter experts are expected to be available to consult with the Vendor during the development of the interface plan and to assist with the determination and adoption of acceptable alternatives to interfaces wherever feasible.

The WVDOT expects to code and unit test interface programs that extract data from the legacy applications using the formats and protocols defined by the Vendor for use in the transformation and load processes. Additionally, the WVDOT expects to code and unit test interface programs that load data into the legacy applications using the formats and protocols defined by the Vendor provided that they adhere to the technical standards and procedures of the WVDOT and WVOT. Additionally, the WVDOT expects to be responsible for verifying the accuracy of the interfaces through participation in all levels of testing.

The following matrix summarizes the interface responsibilities of the Vendor and the WVDOT.

EXHIBIT 3: INTERFACE RESPONSIBILITY MATRIX

Interface Roles and Responsibilities	Vendor	WVDOT
Managing Interface Activities	Primary	Support
Interface Planning	Primary	Support
Interface Design	Primary	Support
Installation, Maintenance and Operation of Tools	Primary	Support
Interface Program Specifications	Primary	Support
Interface Development/Unit Test (Transformation and Load Processes)	Primary	Support
Interface Development/Unit Test (Extract Processes)	Support	Primary
Audit/Control Reports	Primary	Support
Interface Procedures	Primary	Support
Conduct Integration/System Testing	Primary	Support
Execute User Acceptance Testing	Primary	Support
Verify User Acceptance Testing	Support	Primary
Provide Subject Matter Expertise	Support	Primary
Execute Production Cut-over	Primary	Support
Verify Production Cut-over	Support	Primary

4.2.2.14. Custom Forms

The Vendor is expected to develop custom forms, approved by the WVDOT required to meet all requirements which cannot be supported by the VPS.

4.2.2.15. Custom Reports

In addition to baseline reports which are provided with the VPS, the Vendor must develop the following custom reports:

- All reports required to meet WVDOT and federal reporting requirements;
- All reports specifically identified in the requirements matrices and classified as Priority "1" or Priority "2" if the report cannot be addressed by the VPS's standard reports; and
- All reports specifically identified in the requirements matrices and classified as Priority "3" if the report requirement cannot be met by a standard report, subject to the approval of the WVDOT.

4.2.2.16. Custom Workflow Configuration

The Vendor shall describe its approach to analyzing, establishing, documenting, and assisting in the deployment of the workflow, electronic notification, and electronic approval processes that are built into the system, as well as those developed during the project. The approach is expected to include a recommended schedule and/or priority for deploying these features at the WVDOT, based on the Vendor's experiences with implementations of similar size and scope.

The Vendor is expected to also recommend specific workflow and notifications that should be considered for deployment by module based on previous implementations of comparable size and functionality, and a recommended schedule for deployment of this additional functionality.

For workflow customization, the Vendor shall assume that delivered VPS workflow tools will be used to develop, configure, customize, and manage the defined workflows. The Vendor shall assume that workflow processes defined in this section are custom workflows and are not part of the standard workflow processes delivered as part of the VPS. Standard workflows that are part of the delivered product must be configured as part of software configuration services. Further, the Vendor shall assume that the custom workflow processes are defined by the following levels of complexity:

EXHIBIT 4: WORKFLOW COMPLEXITY LEVELS

Complexity	Complexity Descriptions
Simple	A two-step process that includes evaluating data against up to two variables from step one, then the initiation of step two based upon the results of the query.
Average	A process with up to five steps that includes evaluating of data against up to five variables from step one, the initiation of step two based upon the results of the query with a simple approval process, including the development of a simple data entry screen and an approval screen.
Complex	A process with greater than five steps that includes evaluating data against variables entered in step one, the initiation of step two based upon variable rules, the initiation of step three based upon the results of a multi-table query with a multi-step approval, rejection, and re-approval process, including the development of related data entry screen and approval screens.

The Vendor is expected to modify, or custom develop all workflows specifically identified as a Priority "1" or Priority "2" requirement in the requirements matrices if the requirement cannot be met by the standard workflows provided with the VPS. The Vendor is expected to also modify, or custom develop all workflows identified as a Priority "3" requirement in the requirement matrices if the requirement cannot be met by the workflows provided with the VPS, subject to the approval of the WVDOT.

In addition, for costing purposes, the Vendor should plan on designing, developing, and testing additional workflows of the following complexities:

EXHIBIT 5: ADDITIONAL WORKFLOWS WITH COMPLEXITIES

Complexity Level	Number of Workflow Processes
Simple	2
Average	5
Complex	3

Deliverables:

- Completed Programs for Enhancements and Modifications;
- Completed Custom Reports;
- Completed Automated Interfaces;
- Completed Forms; and
- Completed Custom Workflows.

4.2.2.17. Data Conversion

Through the implementation of the new VPS, the State expects to retire the Equipment system within REMIS. Data conversion into the operational application components of the VPS is expected to at least include data that is required to support ongoing business processes.

In addition, some historical data is expected to be converted into the operational systems or data warehouse where a solid business case is identified through detailed conversion planning. Any additional historical data for inquiry, reporting or analysis may need to be either converted to the data warehouse, or remain available "read only" from legacy applications until such time that the data is either converted or no longer required.

The Vendor is expected to describe its approach to performing all required data conversion activities associated with the project. The WVDOT and Vendor responsibilities for data conversion are outlined below.

Vendor Responsibilities

The Vendor will be responsible for developing a comprehensive Data Conversion Plan that defines all the fundamental concepts and activities related to converting data from retired legacy applications to the new VPS. The Data Conversion Plan is expected to encompass all phases of the conversion effort from initial designs and strategies through the development and testing of automated conversion programs and support for the commencement of live operations. The general scope of work to be provided by the Vendor is expected to include, but not be limited to:

- Managing all activities related to converting legacy data to the new VPS;
- Developing a detail Data Conversion Plan document which describes the following:
  - All data to be loaded or entered in the new system,
  - Data sources,
  - Expected data volumes,
  - Conversions where automated programming can be used to significantly reduce data conversion labor,
  - Roles and responsibilities and timing requirements for the conversion effort, and
  - Extraction transformation and load methods to be used;
- Installing, maintaining, and operating for the duration of the implementation project, tools to support the design, development, and testing of conversions;
- It is the WVDOT's expectation that the Vendor leverage the same ETL architecture/middleware tools that will be used by the interface architecture;
- Developing programming specifications in accordance with the detailed data conversion plan that includes coding and unit and integration testing for the conversion programs;
- Coding of conversion programs that transform and load data to the new VPS in accordance with program specifications;
- Building any crosswalk file structures required to assist the WVDOT in developing test scenarios and conducting acceptance testing;
- Performing unit and integration testing of the conversion programs developed by the Vendor;
- Developing reports and other means for WVDOT personnel to validate converted data;
- Running the conversion programs and assisting the WVDOT with the verification of the converted data in the production environment;
- Managing execution of multiple "dress rehearsals" of the end-to-end conversion process into a copy of the production environment in test mode prior to final conversion. This includes execution of both extract programs of legacy system data developed by the WVDOT and all other processes developed by the Vendor;

- Adapting and re-running conversion programs as necessary to properly convert and load the data, and for maintaining a conversion log to track the accuracy of all conversion efforts; and
- Executing the final production data conversion process at the time of cut-over to the new system(s).

Automated data to be converted and loaded in the new VPS production database(s) includes (but is not limited to) items specifically listed in the functional requirements and other data required to operate the new system(s) in production.

Development of the Data Conversion Plan and management of the tasks contained within the Data Conversion Plan shall conform to best practices adopted by the project and incorporate the following conversion specifics including:

- Assumptions made when developing the Data Conversion Plan;
- Confirmation of which applications are expected to be retired or retained based on the adopted implementation plan;
- Confirmation of detailed data mapping required to support ongoing business transactions;
- Identification of detailed historical data required to be converted and the business case to support their conversion;
- Identification of conversion risks with mitigation strategies;
- For redundant data, such as vendor codes maintained in multiple applications, the approach for how the data should be merged or converted into a single set of data;
- Pre-conversion activities such as archiving, purging, and cleansing of legacy data;
- The architectural components of the data conversion including estimated sizing in terms of processing power and amount of data storage required;
- An error correction methodology for rejected conversion data, for example an on-line suspense file, that will ensure that data is not "lost";
- Definition of the data formats and protocols that are expected to be observed between ETL components for example Comma Separated Value (.csv) or Extensible Markup Language (XML);
- Determination of which data is expected to be converted using a manual, automated, or semi-automated method;
- Audit controls that will be built in to permit the accurate completion of data conversion processing and reconciliation within a three (3) day period; and
- Communication and coordination methodology to be used with agencies and other external parties.

The Vendor is expected to develop queries and reports required by WVDOT to validate the WVDOT data in the VPS. Prior to final conversion into the production environment, at least two (2) complete and successful test conversions must be performed by the Vendor with active WVDOT participation. These mock conversion exercises shall at a minimum consist of the Vendor loading data extract files provided by WVDOT and Vendor providing reports/query results so that WVDOT can validate the accuracy and completeness of the conversion. Upon completion of the process, the Vendor must provide a letter certifying that the programs utilized for conversion have been properly tested and are fit for the task of performing the conversion into the VPS.

WVDOT Responsibilities

The WVDOT expects to be responsible for subject matter knowledge of existing applications and associated data or for coordinating and ensuring access to subject matter knowledge from other State agency staff. If correction of any of the WVDOT-provided data is expected, those tasks are the responsibility of the WVDOT, although direction and support from the Vendor shall be provided if required.

The WVDOT expects to perform all data cleansing and manual conversion processes, with the expertise and guidance of the Vendor. Manual conversions are defined as "manual" when the Vendor and the WVDOT agree that the volume is too low to justify the cost of developing an automated conversion program. The WVDOT expects to take responsibility for loading data that is not converted or loaded automatically and for certifying the production database as being accurate.

The WVDOT is expected to be responsible for developing test scenarios and conducting the acceptance testing of conversion programs with the assistance of the Vendor.

The WVDOT expects to code and unit test conversion programs that extract data from the legacy applications and output the data using the formats and protocols defined by the Vendor for use in the transformation and load processes.

The WVDOT will be responsible for verifying the accuracy of the converted/loaded data through participation in all levels of testing. In support of conversion "dress rehearsals", WVDOT staff will be responsible for manual entry and correction, data reconciliation and acceptance, technical support, issue resolution and executive level go/no go decision making should be available to role play their tasks in real time. The WVDOT "ERP for DOT" Steering Committee will define the timing, requirements, and acceptance criteria for the test conversions.

The following matrix summarizes the conversion responsibilities of the Vendor and the WVDOT.

EXHIBIT 6: DATA CONVERSION RESPONSIBILITY MATRIX

Data Conversion Roles and Responsibilities	Vendor	WVDOT
Managing Conversion Activities	Primary	Support
Data Conversion Planning	Primary	Support
Conversion Design	Primary	Support
Installation, Maintenance and Operation of Tools	Primary	Support
Conversion Program Specifications	Primary	Support
Conversion Development/Unit Test (Transformation and Load Processes)	Primary	Support
Conversion Development/Unit Test (Extract Processes)	Support	Primary
Crosswalks	Primary	Support
Reconciliation Reports	Primary	Support
Conduct Integration/System Testing	Primary	Support
Execute Dress Rehearsals / User Acceptance Testing	Primary	Support
Verify Dress Rehearsals / User Acceptance Testing	Support	Primary
Provide Subject Matter Expertise	Support	Primary
Data Cleanup	Support	Primary
Perform Manual Data Conversions	Support	Primary
Execute Production Cut-over	Primary	Support
Verify Production Cut-over	Support	Primary

Deliverables:

- Data Conversion Plan;
- Data Conversion Log; and
- Converted Data in Production Database.

4.2.2.18. Security Configuration

The proposed VPS must provide application controls to prevent unauthorized use of the system, maintain system process controls, and log all transactions. In addition, the system must provide security to limit availability to application functionality, software screens, data records, data elements, and date element values where appropriate.

The Vendor is expected to describe its approach to analyzing, establishing, and documenting security functions into the WVOT's security network.

The Vendor should fully describe its approach to security for the proposed solution, including, but not limited to, the use of firewall hardware and software, intrusion detection/ prevention systems, other protective measures, and other measures that provide in-depth defense for the VPS. The Vendor is expected to fully describe its risk management approach to application development and deployment in terms of threat and vulnerability identification, analysis and prioritization, and mitigation techniques.

4.2.2.19. Testing

The Vendor shall provide as part of its Technical Proposal an overview of its testing methodology and testing master plan to implement its proposed solution. At a minimum, the testing approach proposed must include the provisions outlined in this section. The Vendor shall develop a master test plan and complete tests to demonstrate that all functions and capabilities of the solution as defined by the system requirements to be delivered by its VPS perform as expected according to the system requirements and in compliance with industry standards.

During execution of the project, WVDOT shall review and approve formal test plans and schedules proposed by the Vendor and will witness and determine the acceptability of the test results. The Vendor shall provide all test support personnel, test sites, and environments in accordance with the master test plan and aligned with the responsibilities detailed in the Testing requirements of this RFP. In addition, the Vendor shall conduct all tests in accordance with the project schedule and the approved test plans and procedures. Approval of any aspect of testing shall not relieve the Vendor of their responsibility to meet all requirements of this RFP.

During the development of the solution, the Vendor shall conduct a comprehensive program of internal testing and walk-throughs to ensure that the solution meets the functional specifications set forth in this RFP and that defects are detected and removed upon identification prior to demonstrating the system to WVDOT. Progress on these tests shall be reported during project status meetings.

The Vendor is expected to describe its approach and commitment to all phases of testing required for a system of this magnitude, including, but not limited to:

- Unit testing;
- System testing;
- Integration testing;
- Performance (load/stress) testing; and
- User acceptance testing.

The Vendor shall also list and describe any tools used to facilitate the testing process, including those tools used for performance testing. The Vendor must provide any required training on the proposed testing tools to all WVDOT staff that are expected to use the proposed testing tools.

All system components must be subjected to system testing performed by a test team composed of Vendor and WVDOT staff. The Vendor must conduct unit, integration, and system testing. The Vendor must assist the WVDOT with acceptance testing. The system test team is expected to function as system users during system testing and must evaluate all test outcomes. The system test team should direct system testing and operate the system in accordance with the system testing plans. The system test team must provide all error resolution and other technical support as required.

4.2.2.19.1. System Test Plans

The Vendor must prepare system test plans that verify that:

- The new configured, modified, and unmodified software work in concert and as expected;
- The system has been properly configured for use for the WVDOT;
- Reports and correspondence work in accordance with WVDOT requirements;
- All scripts or job streams run properly;
- All security roles, functions and controls operate as intended; and
- All interfaces function properly.

This test plan must be comprehensive in scope and is expected to be drafted in cooperation with project management, IT staff assigned to the project, and subject matter experts.

4.2.2.19.2. Application System Testing

The Vendor will be responsible for conducting system tests in accordance with the approved VPS test plans. All system test results must be documented, exceptions analyzed, and any software defects corrected. The Vendor must lead selected WVDOT Project team members through the system test process so that WVDOT representatives may review the test process and outcomes and learn about system operations and functionality. This test shall be thorough enough to ensure that few software or configuration "bugs" are uncovered in the User Acceptance Test which will follow.

4.2.2.19.3. User Acceptance Test Planning

The Vendor must prepare a User Acceptance Test Plan, which will be subject to WVDOT approval. The plan must include:

- Structuring of the test cycles;
- Designing test scripts and developing a thorough baseline set of test scripts;
- Supporting WVDOT staff to develop test scripts for unique use cases;
- Explaining user actions, transactions, and processing outcomes; and
- Organizing the test tracking, outcome tracking, and exception follow-up procedures.

The User Acceptance Test Plan is expected to be built around the WVDOT's most important fleet and equipment management business processes but must include comprehensive testing of the software to ensure that it conforms to marketed or promised functionality.

4.2.2.19.4. User Acceptance Testing Assistance

The WVDOT expects to assume responsibility for conducting user acceptance testing of the entire application. The Vendor must provide assistance during such testing. This assistance must include:

- Submitting off-line jobs;
- Performing backups;
- Restoring databases as required;

- Analyzing and explaining outcomes;
- Making timely corrections to identified software issues/deficiencies; and
- Answering questions as they arise.

Successful completion of this test will be required before the software can be approved for production use.

4.2.2.19.5. Performance Testing and System Tuning

The Vendor must conduct performance testing and system tuning for the fully configured and tested software prior to commencing live operations and at a preliminary point in the project sufficiently in advance of the implementation date to allow reasonable tuning. These tasks must be coordinated and performed with WVDOT and/or WVOT system programmers, database administrators, security analysts, and application development staff. The WVDOT recognizes that performance testing and tuning activities may be necessary at several stages in the process. For example, tuning could take place after the software installation, prior to production migrations and during initial production operations.

If modifications are made to the application software to meet the WVDOT's unique requirements, the Vendor must review and make adjustments to ensure acceptable performance.

Deliverables:

- Master Test Plan;
- System Test Plans;
- Application System Testing execution/completion;
- User Acceptance Test Plan;
- User Acceptance Test execution/completion;
- Performance Test Plan;
- Performance Testing Assistance; and
- Performance Testing.

4.2.2.20. Training

The Vendor shall describe a strategy for project team training and end user training that appropriately integrates with the Vendor's methodology and timeline. Although the WVDOT intends to deliver most of the end user training sessions, the Vendor must provide training to the WVDOT project team, develop the end user training materials, conduct the train- the-trainer sessions, and provide support to WVDOT as they deliver the end user training session. This section is expected to address all types of required training, including but not limited to the following:

- Project team training to be provided to the WVDOT's core project team upon project initiation and for conference room pilots (or similar activities) to ensure the WVDOT project team has a baseline understanding of the Vendor's proposed software solution in order to be able to actively participate in project activities;

- Technical, security, and operations training to support development, implementation, and production;
- End user training to support end user training, implementation, and ongoing needs;
- Deeper knowledge transfer to a core group of functional, administrative, programming, security, and other technical and operations personnel to support independent operations capability before the Vendor departs; and
- Training Guides, User Guides, and Quick Reference Guides.

4.2.2.20.1. Training Plan

The Vendor must provide a detailed training plan for the analysis, design, implementation, and evaluation of a comprehensive training program for the VPS. The Training Plan, which is to be updated on a regular basis and delineate training goals and objectives, must serve all levels of the project, including the project team, system users, trainers, and technical staff.

The Training Plan must be based on a comprehensive training needs assessment conducted by the Vendor and must also describe the types of training to be employed to meet identified needs. Computer based training (CBT) may be utilized where appropriate for specific training classes with prior approval from the WVDOT, provided that all CBT is expected to be audio-video. Exceptions to the required audio-video CBT format may be approved by the WVDOT on a case-by-case basis.

4.2.2.20.2. Training Curriculum

The Vendor is expected to identify, develop, and document the training curriculum that will be used to educate and train WVDOT staff in the development, configuration, implementation, maintenance, support, and use of the VPS.

4.2.2.20.3. End User Training

A train-the-trainer classroom approach is expected to be pursued by the Vendor to assist the WVDOT in training employees who will be using the VPS. As part of this effort, the Vendor must provide:

- Classroom materials to support the classroom training effort that have been customized to address specific software configuration and customizations made as part of the VPS project;
- Training for WVDOT trainer candidates that includes:
  - Best practices on training for the proposed software,
  - Practice training sessions,
  - The business processes and system functionality on which they are expected to provide training, and
  - How to customize the training materials and set-up specific reference data in the training environment;
- A stable, tested training environment pre-loaded with representative converted reference and historical data that can become a starting point for creating training materials (including screen prints showing user actions and processing outcomes). Note: For training purposes, the WVDOT expects to take responsibility for entering representative reference data that is impractical or impossible to convert automatically;

- Support to WVDOT trainers prior to and during training; and
- Back up, restore, and troubleshooting assistance in the training environment as materials are prepared and customized and as end user training proceeds.

4.2.2.20.4. Technical and Operations Personnel Training

The Vendor must supply classroom and substantial hands-on training to ensure that WVDOT personnel have the necessary skills to operate and maintain the system once in production. For solutions implemented in an on-premise model, it is assumed that WVDOT or WVOT personnel will perform all operations and system administrative functions with assistance as needed by the Vendor when live operations commence. Such training must include systems operations, including system startup, backup and recovery, job scheduling, troubleshooting, and any other tasks necessary to operate the system; training on any components of the operating environment that are new to the WVDOT; as well as training on the use of the Vendor's development tools, system management, and application administration tools.

4.2.2.20.5. Software Education Sessions

The Vendor must provide education sessions that describe:

- The software configuration;
- Organization of software libraries;
- System operation procedures for use during the Project;
- System administration responsibilities, log on/log off procedures, workflow, and security; and
- Other topics necessary to educate WVDOT personnel on "system housekeeping" during the project.

All training is expected to be provided at training facilities provided by the WVDOT.

Deliverables:

- Project Team Training;
- Comprehensive Training Plan;
- Training Curriculum;
- End User Training;
- Technical and Operation Personnel Training;
- Training Materials; and
- Software Education Sessions.

4.2.2.20.6. Documentation

The Vendor is expected to describe its proposed approach for developing and maintaining technical and end user documentation, systems and operational documentation, system configuration documentation, and procedural documentation, including manuals, quick reference guides, tutorials, online help, short video clips and other techniques as appropriate. The Vendor shall also describe the approach used to keep technical and user documentation current throughout the project, and throughout the life of the system.

The Vendor must develop and provide to the WVDOT all system documentation at the time the system is presented for final acceptance. The Vendor must provide complete, well- written, and accurate technical, system, and user documentation. The Vendor also must provide complete source code for any custom-developed work products. All documentation must be available in both paper and electronic form (in a format acceptable to the WVDOT). The documentation must be updated throughout the course of the Project. The documentation must include, at least, the items described in the following documentation sub-sections.

4.2.2.20.6.1. Security Administrators Guide

The Vendor must prepare a comprehensive security guide that combines general reference information with WVDOT-specific procedures to assist security administrators in performing their duties.

4.2.2.20.6.2. Workflow Administration Guide

The management and administration of workflow software is expected to be a required duty for selected WVDOT personnel. The Vendor must produce a Workflow Administration Guide that describes the duties of workflow administrators.

The Guide must include:

- Coverage of policies and procedures for workflow setup;
- User setup;
- Work group setup;
- Workflow rules setup;
- Provisions for establishing alternates for absent users; and
- Archiving and reporting.

4.2.2.20.6.3. Online Help

The Vendor shall describe the online help functions delivered with the proposed software, and the process available, if any, to customize the online help to support the software as configured and customized (if necessary) to meet the WVDOT's business needs.

Deliverables:

- Security Administrators Guide (and updates);
- User Documentation (and updates);
- Workflow Administration Guide (and updates);
- Online Help;
- Data Element Dictionary; and
- Entity-Relationship Diagrams.

4.2.2.20.7. Knowledge Transfer

The Vendor is expected to describe its knowledge transfer strategy to be utilized throughout the project to ensure that WVDOT employees are prepared to operate and maintain the system at go-live. The response shall describe the specific procedures that the Vendor expects to undertake to mentor WVDOT staff and ensure adequate WVDOT experience and knowledge of the system by the time of transition.

The Vendor is expected to also describe its approach to transferring operation of the VPS to the WVDOT (for implementations under an on-premise model). The description shall include all elements necessary to transfer a fully functioning system, including software, hardware, data, and processes.

It is important to the WVDOT that, as a part of the Knowledge Transfer Plan, an effective mentoring program is developed for key WVDOT staff. The WVDOT is interested in innovative ideas from Vendors concerning how the mentoring vision can be practically fulfilled.

4.2.2.20.7.1. Knowledge Transfer Planning

The Knowledge Transfer Plan is a key deliverable for the WVDOT. It is the intention of the WVDOT to require formal sign-off from key Vendor and WVDOT staff members that appropriate knowledge transfer has occurred. The Vendor must work closely with the WVDOT Project Manager and team members to document the knowledge transfer activities that are expected to occur, how they will occur, and the individuals responsible for each activity. As part of the plans produced, the Vendor must document the design, configuration, development, testing and other tasks and assignments that WVDOT personnel are expected to perform to facilitate knowledge transfer.

The planning is expected to explicitly include those activities necessary to prepare WVDOT project team members for their project and post- implementation roles.

Deliverables:

- Knowledge Transfer Plan; and
- Formal Knowledge Transfer Signoffs.

4.2.2.21. Deployment (Roll-out) Support

The WVDOT requires an extensive and carefully structured approach to the implementation of the VPS. This includes the organization and execution of cut-over activities necessary to transition operations to the new system(s). The Vendor must provide on-site support throughout the entire implementation period. More specifically, the WVDOT requires at least the services described below.

4.2.2.21.1. Production Cut-over (Go-Live) Planning

The Vendor must produce a detailed Deployment Cut-over Plan to reflect all project activities that impact deployment of the new system(s) into the production environment.

The Deployment Cut-over Plan shall document all steps required to make a successful cut-over to the production environment, including specific cut-over tasks, planned and actual dates for tasks completed, task responsibilities, task dependencies, estimated work effort required to complete each task, task status, results of task completion, and sign-off for each task completed.

The Vendor must also develop a Contingency Plan for mitigating and resolving those risks that have been identified as impacting deployment. The Contingency Plan must address the strategies for business and

system continuity planning as a result of implementation issues. For each risk identified, the Contingency Plan must include one or more alternate solutions that are acceptable to all project stakeholders. The Vendor is responsible for executing the contingency plan as issues arise during deployment, upon approval of the WVDOT.

The Deployment Cut-over Plan must demonstrate to the WVDOT how the Vendor will implement the VPS. The plan must detail the approach for coordinating the following:

- Data conversion activities;
- Technical preparation and system changeover activities;
- Development of a cut-over activities checklist;
- Staffing requirements, by role and responsibilities, for both Vendor and WVDOT staff for all deployment/cut-over activities;
- Development of a list of activities required to transition open work activities over to the new VPS;
- Deployment schedule; and
- The process for developing a contingency plan for identifying, communicating, resolving risks, and maintaining the current production capability if the deployment is delayed.

Deliverables:

- Contingency Plan; and
- Deployment Cut-over Plan.

4.2.2.21.1.1. Production Cut-over (Go-Live) Checklist

The Vendor must maintain a Cut-over Checklist that tracks each activity required to ascertain that the VPS is ready for deployment. This checklist must be reviewed with the WVDOT personnel with increasing frequency as the Go-Live date approaches to confirm:

- All testing has been successfully completed;
- All staff have completed staff and management training;
- All data has been converted, cleaned, and accepted by the user;
- All interfaces are functioning as required;
- All site preparation requirements have been met;
- User Support is established; and
- All user and system supports are in place.

4.2.2.21.1.2. Establish Procedures for User Support

User support personnel are expected to respond to questions regarding the use of the application. Efficient and effective procedures for providing user support must be established before the beginning of implementation and must be supported by the Vendor through the end of the production support period. The Vendor must provide software and training for incident tracking.

4.2.2.21.1.3. Production Transfer

Once the system has been approved, in writing, as ready for production, the Vendor must work with the WVDOT to perform a production turnover procedure. Among other things, this procedure requires that the Vendor turn over all system components in a systematic fashion into the production environment. The Vendor must ensure that the source code, compiled modules (where required), job streams, other components of the production environment, and all documentation are ready and organized for the production turnover. The WVDOT expects to then ensure all compiled extension programs have corresponding source code and ensure that all programs are present. The WVDOT expects to also ensure that all components and modules of the production environment can be operated on-line or run to completion as appropriate, and that all modules, job streams (or scripts) are properly documented according to the agreed upon standards.

Deliverables:

- Commencement of Stable Production System.

4.2.2.22. Production Maintenance and Support

On-site technical support and maintenance is required for the implemented VPS. The on-site presence is essential to maintain a stable production environment, and to provide for a smooth turnover of system responsibility to the WVDOT.

The Vendor must provide full onsite post-implementation maintenance and support for 6 months after Go-Live. The Vendor must then jointly manage and perform post-implementation support with the WVDOT for a period of an additional 6 months. This post-implementation maintenance and support will consist of technical, functional, and operational support, and must be provided by skilled personnel who have become familiar with the project over the course of the implementation effort.

The Vendor will have primary responsibility for the production support of the VPS application during the deployment of the new system(s) as described above.

During this period, the Vendor must also be responsible for mentoring assigned WVDOT staff involved in production support to prepare them to assume this responsibility in accordance with a transition plan to be provided by the Vendor. At the designated point in time when the VPS application production support becomes a joint responsibility between the WVDOT and the Vendor, the parties will jointly manage the production support with the Vendor continuing to mentor and assist the WVDOT staff in accordance with the transition plan approved by the WVDOT.

4.2.3. Mandatory Qualification/Experience Requirements

The Vendor as the primary provider of implementation services, must have completed by the Bid Opening Date (firmly established date and time for public opening of responses), an implementation of its proposed Fleet and Equipment Management System for a state department of transportation, a state-level fleet management agency or a state or local government or other public sector transportation agency with total annual expenditures (including state and federal appropriations) of at least $1 billion and with at least 5,000 headcount employees. The software that was implemented during this engagement must currently be in use by that client. The purpose of this requirement is to ensure that Vendors possess the experience, knowledge, and lessons learned associated with large public sector transportation management implementations.

4.3. Desired Requirements

4.3.1. Project Management Desired Requirements

It is preferred that the Project Manager be certified by the Project Management Institute as a Project Management Professional (PMP).

4.3.2. Desired Proposal Format Submission

Vendors should provide responses in the format listed in sections 4.3.4- 4.3.17. The instructions in these sections describe the recommended format for a responsive Technical Proposal and Cost Proposal. Vendors should prepare their proposal in accordance with the instructions and sequence given below. The proposal should be clear and concise in response to the information and requirements described in this RFP. The proposal and any reference material presented should be provided in English on standard 8-1/2" x 11" paper. Foldouts containing charts, spreadsheets, and oversize exhibits are permissible. Each page of the proposal should be clearly and uniquely numbered.

The format and subsections of the Technical Proposal should conform to the tabbed structure outlined in Exhibit 7. All tabs should be labeled appropriately. Adherence to this format is necessary to permit effective evaluation of proposals.

Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems similar to those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below.

4.3.3. Response Reference

Vendor's response should clearly reference how the information provided applies to the RFP request. For example, listing the RFP number and restating the RFP request as a header in the proposal would be considered a clear reference.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

EXHIBIT 7: TECHNICAL PROPOSAL CONTENT

Technical Proposal Content	Reference Section
Title Page	4.3.4
Transmittal Letter	4.3.5
Table of Contents	4.3.6
TAB 1 — Executive Summary	4.3.7
TAB 2 — Vendor Company Profile	4.3.8
TAB 3 — Subcontractor Company Profiles	4.3.9
TAB 4 — Licensed Product Information	4.3.10
TAB 5 — References	4.3.11
TAB 6 — Proposed Project Staff and Organization	4.3.12
TAB 7 — Vendor's Proposed Plan for Providing Requested Services	4.3.13
TAB 8 — Project Goals and Objectives	4.3.14
TAB 9 — Capabilities of Proposed VPS Solution	4.3.15
TAB 10 — Sample Statement of Work (SOW)	4.3.16
Tab 11 - Requirements Matrix Responses	4.3.17

The following sections explain the content for each of the subsections of the Technical Section. ***No pricing or cost information should be included in the Technical Proposal.***

4.3.4. Title Page

The title page shall contain WVDOT and the RFP subject, the RFP number, Vendor's name, business address, telephone number, fax number, name of the primary contact person, email address, and Vendor signature and date.

4.3.5. Transmittal Letter

Vendors should provide a transmittal letter on the Vendor's letterhead signed by an individual authorized to bind the Vendor legally. The Transmittal Letter should include the following:

- Brief Statement of the Vendor's understanding of the scope of software and services associated with this RFP;
- The names, titles, addresses, email addresses, and telephone numbers of the individuals who are authorized to make representations on behalf of and legally bind the Vendor;
- A Statement that the entire proposal and the price contained therein is binding upon the Vendor in all respects for a period of 180 days from receipt of the BAFO (Best and Final Offer), or from submission if no BAFO is requested;

- A Statement designating the firm that should function as Vendor (i.e., the primary contractor) in response to the RFP;
- A list identifying all firms proposed as subcontractors or software providers;
- A Statement confirming the Vendor, if it is proposing any software for which it is not the original equipment manufacturer (OEM), is an authorized re-seller of that proposed software solution;
- A Statement that the Vendor and any subcontractors in the Vendor's proposal presently have no interest, direct or indirect, which would conflict with the performance of services under this Contract and shall not employ, in the performance of this Contract, any person having a conflict;
- A Statement that all staff members of the Vendor's proposed team shall follow all WVDOT and State of West Virginia administrative policies, procedures, requirements, specifications, and standards; and
- The signature of a person authorized to bind the Vendor legally, with the name and legal title of the individual typed under the signature.

4.3.6. Table of Contents

Each proposal should include a table of contents that clearly identifies the material by location of each Section and Subsection. Each page of the response should be clearly and uniquely numbered. Additionally, the table of contents should clearly identify and denote the location of all enclosures and attachments to the proposal.

4.3.7. TAB 1 – Executive Summary

In the Executive Summary, the Vendor shall condense and highlight the contents of the proposed solution in such a way as to provide the WVDOT with a broad understanding of the proposal in ten (10) pages or less. Vendors should provide a concise summarization of the proposed products and services and how these proposed products and services address the requirements presented in the RFP.

Vendors shall present a summarization of their planned approach, their successful public sector implementations of the proposed solution, highlight the relevant public sector experience for all key staff included in the proposal and describe why the product and service providers assembled in the proposal are best qualified to perform the work required.

Vendors should also include a list of each specific term that it proposes to modify with the requested changes identified by using strike-through for proposed deletions and underlines for proposed additions to the term. Additionally, the Vendor should provide compelling justification for any proposed changes.

4.3.8. TAB 2 – Vendor Company Profile

The Vendor shall include a detailed narrative description of its organization. The narrative should include the following:

- Brief overview of business operations, with an emphasis on the development and implementation of Fleet and Equipment Management System solutions for state departments of transportation and other public sector organizations;
- Date established;
- Ownership (public, partnership, subsidiary, etc.);

- Location in which the Vendor is incorporated;
- Office location(s) responsible for the performance of proposed tasks;
- Full disclosure of any proposed off-site activity and the locations involved;
- Vendor's organizational chart relevant to this project;
- Full disclosure of any potential conflict of interest;
- A Statement of whether, in the last ten (10) years, the Vendor and any officers in their individual or professional capacity or associated with another company have filed (or had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors, and if so, an explanation providing relevant details;
- A Statement of whether there are any pending Securities Exchange Commission investigations involving the Vendor, and if such pending or in progress, an explanation providing relevant details and an attached opinion of counsel as to whether the pending investigation(s) may impair the Vendor's performance in a Contract under this RFP;
- A Statement documenting all open or pending litigation initiated by Vendor or where Vendor is a defendant in a customer matter;
- Full disclosure of any public sector Fleet and Equipment Management System related contracts terminated for cause or convenience in the past five (5) years;
- Full disclosure of any criminal or civil offense; and
- Statements of financial stability, indicating that the Vendor has the financial capacity to provide the entire solution and that the Vendor has adequate resources to continue as an ongoing concern.

4.3.9. TAB 3 – Subcontractor Company Profiles

4.3.9.1.Fleet and Equipment Management System Software Provider

For the Fleet and Equipment Management System Software Provider, the Vendor shall provide the same information as the Vendor Company Profile listed above in Section 4.3.8. (if the Vendor is not the Software Provider). If the Vendor is the Software Provider, no information is required in this subsection.

4.3.9.2.Third Party Software Providers

For any Third-Party Software Provider included in the proposal, Vendor shall provide the same information listed for the Vendor Company Profile in Section 4.3.8. If there are no Third-Party Software Providers, no information is required in this subsection.

4.3.9.2.1. Service Providers

For any Service Providers included in the proposal, Vendor shall provide a description of the role and level of involvement proposed for the Subcontractor and shall provide the same information listed for the Vendor Company Profile in Section 4.3.8, as applicable. Vendor shall include a copy of the teaming agreement or subcontracting agreement between the Vendor and each Service Provider as an attachment to its proposal. Subcontractor Corporate Information is not required if the Subcontractor is providing five (5) or fewer staff members in the proposal.

4.3.10. TAB 4 – Licensed Product Information

4.3.10.1. Business Applications

In this section, the Vendor shall provide a detailed product summary chart that lists:

- Each Software Provider (please list the primary Fleet and Equipment Management Software Provider first);
- The different product sets to be provided by each Software Provider;
- The modules/functions within those product sets;
- The release level of the products to be used;
- The next release/version level to be released; and
- The planned release date of the next release/version.

4.3.10.2. Technology Products

The Vendor shall take the following into account when addressing the technology components of their proposal:

- The Vendor shall provide the WVDOT with network, desktop, and server requirements for all software.
- The Vendor shall specify the requirements for all required cache servers, web servers, application servers, and database servers for installation per the Vendor's specifications.

4.3.10.2.1. Ad Hoc Reporting Tools

A reporting solution shall enable business users to create their own reports and explore enterprise data by downloading data or utilizing standard ad hoc reporting tools.

4.3.10.2.2. Business Intelligence Tools

It is the WVDOT's intent to take full advantage of the information captured within the new VPS to support Business Intelligence functionality in addition to operational reporting requirements. The expectation for Business Intelligence is to provide the capability for both tactical data analysis associated with program performance and strategic data analysis associated with long-term planning and measurement of operational performance against strategic goals.

4.3.10.2.3. Product Maintenance

In this section of the proposal, the approach of the Fleet and Equipment Management System Software Provider(s) and the Third-party Software Provider(s) to meet the WVDOT's requirements to provide product maintenance is described.

Upon notification of a maintenance problem, Vendor should perform an adequate level of problem determination to identify and resolve the issues (if possible) based upon known product or customized solution issues. After first having completed proper due diligence, problem determination, and using Software Provider resources and content to attempt to resolve the support incident, the Vendor may triage to the Software Provider and leverage the Software Provider as tier two support whereby the Software Provider may work directly with the WVDOT to fix a particular problem while the Vendor continues to take full responsibility for the outcome of the incident by monitoring progress, logging, tracking, and obtaining other resources (if the Software Provider has not solved the issues) and any other effort required to resolve support incidents that arise during the life of the Contract.

4.3.10.2.4. Future Direction

The Vendor shall describe the future direction of the technology of the proposed products. Also, include future plans for public sector functionality for the components of the proposed solution. The Vendor should discuss in some detail the strategic product plans for the proposed software products in this response. What have been the significant enhancements to the products in the past few years, and what is expected in the next three (3) years? Describe how the proposed solution provides a stable robust environment for the WVDOT and provides a platform for growth and technological advances for the future.

4.3.11. TAB 5 – References

The WVDOT intends to conduct reference checks for account references provided by Vendors. It may, at its sole discretion, contact additional clients not presented as references.

Vendors shall provide at least three (3) client references for the implementation of the Fleet and Equipment Management System software for state or local governments. All references should be for systems in production at this time — not for implementations that are still in progress. Although, not required, state departments of transportation and publics works agencies are preferred.

The following information should be provided for each reference:

- Organization Name;
- Project Name;
- Project Description;
- Contact Name;
- Contact Mailing Address;
- Contact Phone Number;
- Contact Email Address;
- Fleet and Equipment Management Software Product and Release Number(s) Implemented;

- Project Start and End Date; and
- Contract Value.

4.3.12. TAB 6 – Proposed Project Staff and Organization

4.3.12.1. Project Organization

Vendors shall describe their project staffing strategy to coincide with their recommended implementation approach, including any proposed phasing. As part of this project staffing strategy, the Vendor shall recommend when WVDOT participation is expected, how the WVDOT's employees are going to be integrated into the Project Team, where the project team is primarily located and what methods are going to be used to ensure skills and knowledge transfer.

4.3.12.2. Personnel Summary Table

Vendors shall provide a Personnel Summary Table listing each proposed project team member. The Personnel Summary Table should be presented in tabular form similar to the example provided below including the proposed role(s), consultant name, total years of relevant implementation experience with the VPS, years of experience in the proposed role, list of public sector clients in the proposed role, and relevant certifications.

EXHIBIT 8: EXAMPLE OF FORMAT FOR VENDOR PERSONNEL SUMMARY TABLE

Proposed Role(s)	Consultant Name	Experience Summary
Project Manager	Consultant Name	Sample 7-years of experience managing implementation of fleet and equipment management systems for public sector clients. 5 years as project manager on 2 fleet management system projects for state DOTs, State Client Name(s), PMP certification

4.3.12.3. Resumes

The Vendor shall provide resumes for each role to be filled by Vendor personnel. Proposed consultants should be available to staff the project. For purposes of planning project staffing, the Vendor should assume a start date of November 1, 2021.

4.3.12.4. Staffing Changes

No change may be made in the staffing of the Fleet and Equipment Management System project without the prior approval of the WVDOT. Throughout the term of the Contract resulting from this RFP, the Vendor shall:

- Provide qualified personnel to perform all Services required in this RFP;
- Promptly remove and replace personnel at the request of the WVDOT; and
- Provide written notice and seek WVDOT approval of any plan to add, remove and replace personnel.

4.3.13. TAB 7 – Vendor's Proposed Plan for Providing Services

In order to facilitate the Evaluation Committee's comparison of proposals, the Vendor's response to this section of the RFP shall conform to the following format without exception.

4.3.13.1. Timeline and Implementation Phasing Approach

The Vendor shall describe its proposed implementation timing and phasing approach and include a phasing schedule and timeline which outlines their project plan and detailed staffing. It should be based on the Vendor's experience with the solution being proposed and provide the WVDOT with the best balance of cost and risk for the implementation of the VPS. The Vendor should also provide a thorough explanation of its rationale to support its proposed phasing. Related cost information should be presented in the Cost Proposal and shall not be included in the Technical Proposal.

Any required clarifications regarding the phasing or timelines should be addressed during the Discussion and Best and Final Offer process.

The description provided should include the following information for each module:

- Implementation timeframes;
- Milestones and implementation phasing (if any);
- Deliverables with planned approval date and mapped in the work plan; and
- Any software upgrades that should occur during the project.

4.3.13.2. System Development Methodology Overview

It is the Vendor's responsibility to propose a system development methodology (SDM) that is defined, documented, repeatable, and emphasizes project management best practices.

The project scope and cost should include training the WVDOT project team staff on the Vendor's SDM. The proposal should identify certifications the Vendor has received, such as Software Engineering Institute's (SEI) "Capability Maturity Model" (CMM) assessments, the International Organization for Standardization (ISO) 900x certifications, the "Institute of Electrical and Electronics Engineers" (IEEE) Software Engineering Standards, and any other pertinent certifications.

4.3.13.3. Project Management Methodology and Approach

The Vendor shall describe its approach to managing the project. As part of its project management approach, the Vendor should describe the project management tools, standards, controls, and procedures that are going to be utilized to create a proven, reliable process. This section should also include a brief description of the Vendor's approach for managing the project on a daily basis. The intent of this information is to provide assurance to the WVDOT of the Vendor's demonstrated ability to manage large, complex software projects such as the Fleet and Equipment Management System project in a manner that ensures quality, project success, long-term viability, and lowest cost of ownership.

4.3.13.4. Detailed Description of Services/Deliverables to be Provided

The Vendor should describe in detail how each of the services listed in Section 4.2.2. shall be provided in accordance with the Vendor's methodology.

4.3.13.5. System Support Services

The Vendor should address the following technical elements within this subsection:

- Standard methodology for developing a business continuity plan, continuity capabilities and high-availability infrastructure, as well as a detailed explanation of the related approach, activities, procedures, tools, and templates and how the Vendor manages these activities and leverages the tools and templates;
- Disaster recovery guidance and execution (if necessary) for the duration of the project in accordance with the WVDOT's disaster recovery plan;
- Performance tuning of databases, application servers, web servers, and other software and devices deployed as part of the proposed solution. This includes batch and online software tuning, as well as data conversion software tuning; and
- Software upgrade methodology, as well as a detailed explanation of the related approach, activities, procedures, tools, and templates, and how the Vendor manages these activities and leverages the tools and templates.

4.3.13.6. Lessons Learned

The Vendor should provide a discussion of the significant lessons learned from experience at previous projects of similar size and scope, and how the Vendor plans to apply those lessons to the Fleet and Equipment Management System project.

4.3.14. TAB 8 – Responses to State's Goals and Objectives

The Vendor shall complete the responses to each of the State's goals and the objectives identified in Section 4.2.1. Vendors shall describe how they will comply with each. The completed response should be inserted in the Technical Proposal in TAB 8.

4.3.15. TAB 9 – Capabilities of Proposed VPS Solution

The Vendor shall in narrative format describe the capabilities of its proposed VPS to meet the requirements outlined in Section 4.2.2.3 for a Fleet and Equipment Management System. Vendors are encouraged to include screen shots and other visuals as appropriate to highlight system capabilities and enhance the readability of this section.

The Vendor shall also include within TAB 9 a description of the technical architecture of its proposed solution and the basis for the Vendor's recommendation of this technical architecture. Depending on the technical architecture being recommended, the Vendor shall include the additional information below:

- **On-Premise Model** - Technical specifications for the development, testing, training, production and disaster recovery/reporting landscapes required to implement the VPS, with sufficient detail to allow WVDOT and WVOT to estimate the cost of implementation and operation of the environment.

  Vendor should be prepared to support initial software configuration, development and testing in a Vendor hosted environment to allow sufficient time for the required environment to be established by WVDOT and WVOT. All project activities beginning not later than user acceptance testing shall occur in the State managed on-premise environment.

- **SaaS or Cloud Model** - Detailed discussion of the technical environment in which the VPS will operate including information on the data centers which will host the development/testing/training, production, and disaster recovery environments. The production and disaster recovery environments shall be hosted in data centers which are geographically distant from each other.

4.3.16. TAB 10 – Draft Statement of Work

The Vendor should submit a Sample Statement of Work in TAB 10. This Sample Statement of Work will provide a starting point for drafting the final Statement of Work that will be included in the Contract with the Awarded Vendor as part of contract execution. The Sample Statement of Work should include a description of the roles and responsibilities for each of the services requested in this RFP in accordance with the Vendor's proposed project plan and methodology, and descriptions of all deliverables to be provided.

4.3.17. TAB 11 - Requirements Matrix Responses (Attachment A)

The Vendor shall include within TAB 11a printed copy of its completed Fleet and Equipment Management System Requirements Matrix which is included as Attachment A to the RFP. It shall also submit a soft copy of the completed Requirements Matrix in Microsoft Excel format as part of its online submission or on a flash (USB) drive with its original technical proposal if not submitting via wvOASIS.

4.3.17.1. Requirements Matrix Guidance

The Fleet and Equipment Management System Requirements Matrix defines the functionality and capabilities expected in the new system. The requirements matrix is a Microsoft Excel workbook organized into five (5) tabs (worksheets) by business function, as well as cross-functional capabilities such as management reporting, application architecture and technical architecture.

Each requirement has been prioritized based on its business criticality to WVDOT as follows:

1. Essential; (it is essential that the new Fleet and Equipment Management System provide this capability; in most cases this functionality is available in the current system);
2. Critical (the lack of this capability would represent a significant gap);
3. Important (the capability is highly desired and would likely be implemented by WVDOT if available off-the-shelf or off-the-shelf with configuration in the Vendor's solution); and
4. Desirable (the capability is desired and would be evaluated for implementation if available off-the-shelf or off-the-shelf with limited configuration in the Vendor's solution).

The Proposer shall respond to each requirement in the Fleet and Equipment Management System Requirements Matrix using the response key below.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

EXHIBIT 9: VALID REQUIREMENTS FOR REQUIREMENTS MATRIX

Response	Definition
Customization	Requirement can be met but it will require development of a custom extension or bolt-on that would be a WVDOT-specific custom extension to the proposed software solution. This custom extension will not be part of the base code and will not be maintained as part of the product going forward. In this scenario, the Vendor shall enter an indication of the complexity of the customization within the Customization column of the response spreadsheet as follows: Small: Small customization(s) requiring up to a total of 80 hours for specification, development, and unit testing; Medium: Medium customization(s) requiring a total of 80 to 160 hours for specification, development, and unit testing; and Large: Large customization(s) requiring greater than 160 hours for specification, development, and unit testing. The Vendor shall then itemize the associated cost of each customization cross referenced by requirement number in the appropriate tab of the Cost Proposal spreadsheet.
Does Not Meet	The Vendor's proposed solution does not support this requirement.
Modification to Base Code	Requirement can be met through alteration or modification to the base code of the proposed VPS or through development of new code which will be added to the base software solution and supported in the future as part of the base software. The software licensor will support the migration of this functionality to future releases of the software as part of its supported upgrade path. In this scenario, the Vendor must indicate the complexity of the customization and a schedule for development and testing of the customization and incorporating it into the off-the-shelf product.
Off-the-Shelf	Requirement met with out-of-the-box delivered functionality with no additional configuration required by the Vendor's implementation team.

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

Response	Definition
Off-the-Shelf with Configuration	Requirement met with out-of-the-box delivered functionality; may require configuration of system parameters by the Vendor's systems implementation team during implementation but no scripting, programming or customization effort is required.
Third-Party	Third-party software is required to fully meet the requirement. In this scenario, the requirement is met through the implementation of the out-of-the box functionality of the third-party software included within the Vendor's proposed software solution, but no customization is required. Please note, for purposes of this proposal, a software module owned by the licensor of the core VPS solution is considered to be a third- party software solution if it is separate from or not tightly integrated with the proposed core VPS.
Third-Party-CM	Third-party software solution (the third-party software shall have been proposed by the Vendor), along with some level of additional customization that is required to fully meet the requirement. This customization would be a WVDOT-specific custom extension to the third-party software. This custom extension will not be part of the base code of the third-party software and will not be maintained as part of the product going forward. In this scenario, the Vendor shall enter an indication of the complexity of the customization within the Customization column of the response spreadsheet as follows: Small: Small customization requiring up to 80 hours for specification, development, and unit testing; Medium: Medium customization requiring 80 to 160 hours for specification, development, and unit testing; and Large: Large customization requiring greater than 160 hours for specification, development, and unit testing. The Vendor shall then itemize the associated cost of each customization cross referenced by requirement number in the appropriate tab of the Cost Proposal spreadsheet.

4.3.18. Cost Proposal.

The Vendor shall complete the provided Microsoft Excel Cost Proposal template in Attachment 2 and submit with their proposal. Online submission through wvOASIS is prohibited. The Vendor shall print out one copy of the Cost Proposal and include it and a soft copy of the Cost Proposal in Microsoft Excel format on a flash (USB) drive in a separate sealed envelope from the technical proposal.

The *Technical Proposal* must not contain any cost information relating to the project.

The *Cost proposal* shall be sealed in a separate envelope and will not be opened initially.

4.4. Oral Presentations (Agency Option)

The Agency has the option of requiring oral presentations of all Vendors participating in the RFP process. If this option is exercised, points will be allocated in Section 6.2 below at the time the RFP is issued, or via addendum prior to technical bid opening. During oral presentations, Vendors may not alter or add to their submitted proposal, but only clarify information. A description of the materials and information to be presented is provided below:

Qualifying Vendors will be required to participate in Oral Presentations and Software Demonstrations. The order by which Vendors are assigned Oral Presentation and Software Demonstration dates is to be determined through a random process. Prior to each Vendor's scheduled Oral Presentation and Software Demonstration dates, the WVDOT will provide the Vendor with a detailed demonstration script that specifies the requirements, instructions, rules, and processes that should be adhered to in each presentation.

The period of advance notice, scripts, requirements, instructions, rules, and processes will be the same for all Vendors. The release dates of the scripts to the Vendors will be staggered so that each Vendor has the same amount of time to prepare.

The oral presentation and software demonstration shall be led by the Vendor's Project Manager and be performed by members of the proposed project implementation team. Software demonstrations shall not be conducted by Software Vendor pre-sales staff or other Software Vendor representatives unless they are proposed as an implementation team member.

The oral presentation and software demonstration will be scored by the Selection Committee. In addition, WVDOT reserves the right to adjust scores for other technical proposal categories (up or down) based on information provided by the Vendor during the software demonstration. For example, if the Vendor indicated functionality can be provided off-the-shelf in its response to the Fleet and Equipment Management System Requirements matrix but the Vendor is unable to demonstrate this functionality, WVDOT may choose to adjust the Vendor's score for the requirements matrix.

During oral presentations and software demonstrations, Vendors may not alter or add to their submitted proposal, but only clarify information based on the scripts provided by the WVDOT.

All Software Demonstrations and Vendor Oral Presentations will be held in Charleston, West Virginia if COVID-19 protocols allow or alternatively by webinar if COVID-19 protocols do not allow for on-site meetings.

A description of the materials and information will be forwarded to the invited vendors at least 2 weeks in advance to allow for appropriate preparation.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

SECTION 5: VENDOR PROPOSAL

5.1. Economy of Preparation: Proposals should be prepared simply and economically providing a concise description of the items requested in Section 4. Emphasis should be placed on completeness and clarity of the content.

5.2. Incurring Cost: Neither the State nor any of its employees or officers shall be held liable for any expenses incurred by any Vendor responding to this RFP, including but not limited to preparation, delivery, or travel.

5.3. Proposal Format: Vendors should provide responses in the format listed below:

5.4. Two-Part Submission: Vendors must submit proposals in two distinct parts: technical and cost. Technical proposals must not contain any cost information relating to the project. Cost proposal must contain all cost information and must be sealed in a separate envelope from the technical proposal to facilitate a secondary cost proposal opening.

5.4.1. **Title Page:** State the RFP subject, number, Vendor's name, business address, telephone number, fax number, name of contact person, e-mail address, and Vendor signature and date.

5.4.2. **Table of Contents:** Clearly identify the material by section and page number.

5.4.3. **Response Reference:** Vendor's response should clearly reference how the information provided applies to the RFP request. For example, listing the RFP number and restating the RFP request as a header in the proposal would be considered a clear reference.

Proposal Submission: All proposals (both technical and cost) must be submitted to the Purchasing Division **prior** to the date and time listed in Section 2, Instructions to Vendors Submitting Bids as the bid opening date and time.

REQUEST FOR PROPOSAL
WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

SECTION 6: EVALUATION AND AWARD

6.1. **Evaluation Process**: Proposals will be evaluated in two parts by a committee of three (3) or more individuals. The first evaluation will be of the technical proposal and the second is an evaluation of the cost proposal. The Vendor who demonstrates that it meets all of the mandatory specifications required, attains the minimum acceptable score and attains the highest overall point score of all Vendors shall be awarded the contract.

6.2. **Evaluation Criteria**: Proposals will be evaluated based on criteria set forth in the solicitation and information contained in the proposals submitted in response to the solicitation. The technical evaluation will be based upon the point allocations designated below for a total of 70 of the 100 points. Cost represents 30 of the 100 total points.

Evaluation Point Allocation:

Evaluation Criteria	Potential Points
Qualifications and Performance of the Proposed Vendor TAB 2 (§4.3.8), TAB 3 (§4.3.9), TAB 4 (§4.3.10), and TAB 5 (§4.3.11))	15 Points Possible
Qualifications of Vendor's Proposed Project Staff TAB 6 (§4.3.12)	20 Points Possible
Vendor's Approach and Methodology for Performing the Project TAB 7 (§4.3.13)	10 Points Possible
Assessment of the Fit of the Vendor's Proposed Solution Based on Vendor's Completed Requirements Matrix TAB 8 (§4.3.14), TAB 9 (§4.3.15) and TAB 11 (§4.3.16)	15 Points Possible
Software Demonstration and Oral Interview	10 Points Possible
Cost to Implement and Operate System	30 Points Possible
Total Proposal Score	**100 Points Possible**

6.3. **Technical Bid Opening:** At the technical bid opening, the Purchasing Division will open and announce the technical proposals received prior to the bid opening deadline. Once opened, the technical proposals will be provided to the Agency evaluation committee for technical evaluation.

6.4. **Technical Evaluation:** The Agency evaluation committee will review the technical proposals, assign points where appropriate, and make a final written recommendation to the Purchasing Division.

6.5. **Proposal Disqualification:**

6.5.1.1. Minimum Acceptable Score ("MAS"): Vendors must score a minimum of 70% (49 points) of the total technical points possible in order to move past the technical evaluation and have their cost proposal evaluated. All vendor proposals not attaining the MAS will be disqualified.

6.5.1.2. Failure to Meet Mandatory Requirement: Vendors must meet or exceed all mandatory requirements in order to move past the technical evaluation and have their cost proposals evaluated. Proposals failing to meet one or more mandatory requirements of the RFP will be disqualified.

6.6. **Cost Bid Opening:** The Purchasing Division will schedule a date and time to publicly open and announce cost proposals after technical evaluation has been completed and the Purchasing Division has approved the technical recommendation of the evaluation committee. All cost bids received will be opened. Cost bids for disqualified proposals will be opened for record keeping purposes only and will not be evaluated or considered. Once opened, the cost proposals will be provided to the Agency evaluation committee for cost evaluation.

The Purchasing Division reserves the right to disqualify a proposal based upon deficiencies in the technical proposal even after the cost evaluation.

6.7. **Cost Evaluation:** The Agency evaluation committee will review the cost proposals, assign points in accordance with the cost evaluation formula contained herein and make a final recommendation to the Purchasing Division.

Cost Evaluation Formula: Each cost proposal will have points assigned using the following formula for all Vendors not disqualified during the technical evaluation. The lowest cost of all proposals is divided by the cost of the proposal being evaluated to generate a cost score percentage. That percentage is then multiplied by the points attributable to the cost proposal to determine the number of points allocated to the cost proposal being evaluated.

Step 1: Lowest Cost of All Proposals / Cost of Proposal Being Evaluated = Cost Score Percentage

Step 2: Cost Score Percentage X Points Allocated to Cost Proposal = **Total Cost Score**

Example:

Proposal 1 Cost is $1,000,000
Proposal 2 Cost is $1,100,000
Points Allocated to Cost Proposal is 30

Proposal 1: Step 1 – $1,000,000 / $1,000,000 = Cost Score Percentage of 1 (100%)
Step 2 – 1 X 30 = Total Cost Score of 30

Proposal 2: Step 1– $1,000,000 / $1,100,000 = Cost Score Percentage of 0.909091 (90.9091%)
Step 2 – 0.909091 X 30 = Total Cost Score of 27.27273

6.8. **Availability of Information:** Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

_____

(Company)

_____

(Representative Name, Title)

_____

(Contact Phone/Fax Number)

_____

(Date)

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

Attachment A: Requirements Matrix

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core Module(s)	Third Party Solution(s)	Comments/Notes
FLT-001	1	Fleet Management	Acquisition Replacement and Surplus	Allow for identification of replacement criteria by class and type.						
FLT-002	1	Fleet Management	Acquisition Replacement and Surplus	Allow for transfer of fleet/equipment unit into surplus inventory.						
FLT-003	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with wvOASIS asset management and purchasing function to support sale of surplus property.						
FLT-004	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with BRIM to remove fleet/equipment unit from the State inventory for insurance purposes if sold to an external entity.						
FLT-005	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with BRIM to transfer surplus property from one State agency to another State agency if fleet/equipment unit is sold to another State agency.						
FLT-006	1	Fleet Management	Acquisition Replacement and Surplus	Provide ability for an authorized user to submit a fleet/equipment vehicle acquisition or replacement request.						
FLT-007	1	Fleet Management	Acquisition Replacement and Surplus	When a piece or equipment is in "S" (sale), need prevention of charges against that piece of equipment, unless prompted to correct the status.						
FLT-008	2	Fleet Management	Acquisition Replacement and Surplus	Provide the ability to automate equipment replacement scheduling based on time period, mileage and hours utilized and historical repair costs.						
FLT-009	2	Fleet Management	Acquisition Replacement and Surplus	Identify and report on fleet/equipment units meeting replacement criteria.						
FLT-010	2	Fleet Management	Acquisition Replacement and Surplus	Provide the ability to view current depreciated value to determine surplus timing as it relates to life-to-date maintenance expenditures.						
FLT-011	2	Fleet Management	Acquisition Replacement and Surplus	Support multiple surplus property inventories for fleet/equipment units.						
FLT-012	2	Fleet Management	Acquisition Replacement and Surplus	Record sale of surplus property.						
FLT-013	2	Fleet Management	Acquisition Replacement and Surplus	Generate a transaction based on completion of sale and integrate with wvOASIS General Ledger to support posting of receipt for user agency share of revenue from surplus property sale.						
FLT-014	1	Fleet Management	Acquisition Replacement and Surplus	Provide a workflow process for addition of assets to inventory, transferring of assets from one unit to another, and placement of assets into the field. When assets are relocated, they need to manage and track the organization unit assigned and the new location of the asset.						
FLT-015	1	Fleet Management	Acquisition Replacement and Surplus	Provide a workflow process for retirement and disposal of assets.						
FLT-016	2	Fleet Management	Acquisition Replacement and Surplus	Transfer repair history from one state agency to another if vehicle is transferred/sold to another State agency.						
FLT-017	2	Fleet Management	Acquisition Replacement and Surplus	Allow former State agency owner or former State user agency access to history data on a vehicle after vehicle disposal (sell/salvage).						
FLT-018	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requestor.						
FLT-019	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date requested.						
FLT-020	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: program area.						
FLT-021	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: authorized approver.						
FLT-022	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date approved.						
FLT-023	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requested equipment type.						
FLT-024	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requested manufacturer/make/model (if one) with a justification.						
FLT-025	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: location where fleet/equipment unit will be assigned.						
FLT-026	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: anticipated cost allocation to active chart of accounts codes, grants or projects.						
FLT-027	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date fleet/equipment required by.						
	2	Fleet Management	Acquisition Replacement and Surplus	Calculate estimated replacement cost based on purchase price, estimated salvage value, estimated sale price and depreciation.						
		Fleet Management	Acquisition Replacement and Surplus	Route approval of an acquisition/replacement request based on class, type, unit, estimated cost and other user defined business rules.						
		Fleet Management	Acquisition Replacement and Surplus	Provide approval routing for both internal agency approvals and any required external agency approvals.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-031	2	Fleet Management	Acquisition Replacement and Surplus	Integrate with wvOASIS purchasing function to automatically generate a requisition for an approved fleet/equipment unit pre-populating with available information from the fleet/equipment request form.						
FLT-032	1	Fleet Management	Availability Usage and Downtime	Record downtime, showing user defined reason for downtime (down for maintenance, down for parts, absence of a certified operator, etc.).						
FLT-033	1	Fleet Management	Availability Usage and Downtime	Provide for tracking of downtime from the time the vehicle is delivered for repair until the time the operator is notified of completion of the repair/maintenance.						
FLT-034	1	Fleet Management	Availability Usage and Downtime	Provide means to stop and re-start downtime if a vehicle is worked on, then released, them brought back into the shop and worked on again on the same work order.						
FLT-035	1	Fleet Management	Availability Usage and Downtime	Calculate downtime by class, type, manufacturer, make, model and individual fleet/equipment unit based on user- established parameters.						
FLT-036	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by class.						
FLT-037	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by type.						
FLT-038	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by manufacturer.						
FLT-039	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by model type.						
FLT-040	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by unit.						
FLT-041	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by internal or external maintenance.						
FLT-042	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user-defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages as well as fleet class, fleet type, manufacturer, model type, business unit, maintenance shop and major components						
FLT-043	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by work order type.						
FLT-044	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by work order unit.						
FLT-045	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by major component.						
FLT-046	1	Fleet Management	Availability Usage and Downtime	Provide agency specific downtime analysis including total and averages by class, type, agency unit, maintenance shop, manufacturer, make or model using user defined downtime reasons. Downtime may include or exclude non-working hours, weekends, and holidays.						
FLT-047	1	Fleet Management	Availability Usage and Downtime	Allow comparison of downtime and availability for different manufacturers, makes and models within a fleet type for life-to-date or another user-defined date ranges						
FLT-048	1	Fleet Management	Availability Usage and Downtime	Notifications and/or flags to alert when a piece of equipment has been in a status for an extended period of time, ie. Idle or Down.						
FLT-049	1	Fleet Management	Availability Usage and Downtime	When reporting utilization, downtime, etc., need the ability to reverse and correct entries.						
FLT-050	2	Fleet Management	Availability Usage and Downtime	Provide an optional downtime calendar to be set up by user-defined parameters for each fleet class, fleet type and/or individual fleet/equipment unit. Downtime parameter codes should include hours of service for day, week, month, weekends, and holidays by fleet/equipment unit.						
FLT-051	1	Fleet Management	Cost and Billing	Integrate with wvOASIS cost allocation function to allocate indirect costs associated with fleet management to fleet/equipment units based on various parameters.						
FLT-052	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on number of fleet/equipment units in allocation pool.						
FLT-053	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on total hours fleet/equipment unit is utilized.						
FLT-054	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on total mileage fleet/equipment units is driven.						
FLT-055	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on other user defined variables.						
FLT-056	1	Fleet Management	Cost and Billing	Support allocation of vehicle operating cost to projects, grants and overhead accounts.						
FLT-057	1	Fleet Management	Cost and Billing	Allow the method of billing to be defined at the individual fleet/equipment unit level.						
FLT-058	1	Fleet Management	Cost and Billing	Support billing based on a number of parameters including flat rate; usage rate; actual cost of labor, parts, fuel and/or insurance; and any variance of fixed and actual cost.						
FLT-059	1	Fleet Management	Cost and Billing	Support billing for a fixed monthly cost such as equipment replacement cost.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-060	2	Fleet Management	Cost and Billing	Assign fleet/equipment units to various cost allocation pools.						
FLT-061	2	Fleet Management	Cost and Billing	Provide for the billing period to be user definable at the individual fleet/equipment unit level.						
FLT-062	2	Fleet Management	Cost and Billing	Allow parts to be billed at cost or at an agency specific mark-up percent.						
FLT-063	2	Fleet Management	Cost and Billing	Allow the method of parts billing to be defined at the individual fleet/equipment unit level.						
FLT-064	2	Fleet Management	Cost and Billing	Provide ability to generate a detailed statement for each billing period showing the agency or agency unit cost by fleet/equipment unit; report must be able to be requested by various user defined criteria such as agency unit, fleet type, maintenance shop, fleet/equipment unit owner, etc.						
FLT-065	2	Fleet Management	Cost and Billing	Track and report revenue by unit and maintenance shop.						
FLT-066	2	Fleet Management	Cost and Billing	Provide a separate statement billing for accident and driver abuse repairs.						
FLT-067	2	Fleet Management	Cost and Billing	Integrate with wvOASIS accounts receivable function to support billing for accident/driver abuse repairs.						
FLT-068	1	Fleet Management	Equipment Rental Rate	Need to track rental rate for equipment.						
FLT-069	2	Fleet Management	Equipment Rental Rate	Need to be able to run reports to calculate the equipment rental rates each year or the system needs to able to take the recorded data and automatically calculate the equipment rental rates. The costs that go into calculating the equipment rental rates are the direct charge expense, prorate expenses, direct depreciation (reportable classes), prorate depreciation (non-reportable classes), total hours reported.						
FLT-070	1	Fleet Management	Fueling	Manage fuel inventory, sale and distribution.						
FLT-071	1	Fleet Management	Fueling	Track fueling stations.						
FLT-072	1	Fleet Management	Fueling	Track tank inventory.						
FLT-073	1	Fleet Management	Fueling	Track pump inventory.						
FLT-074	1	Fleet Management	Fueling	Track fuel delivered to or used from a tank.						
FLT-075	1	Fleet Management	Fueling	Track fuel delivered to or used from individual pumps.						
FLT-076	1	Fleet Management	Fueling	Track in-house, agency and vendor fuel purchases.						
FLT-077	1	Fleet Management	Fueling	Track fuel usage by vehicle.						
FLT-078	1	Fleet Management	Fueling	Calculate cost of fuel usage for current month, year-to-date, life-to-date and last year, unit, maintenance shop, fleet class, fleet type, manufacturer, model, fleet/equipment unit.						
FLT-079	1	Fleet Management	Fueling	Establish and maintain an audit trail for all fuel disbursements and adjustments.						
FLT-080	2	Fleet Management	Fueling	Integrate with wvOASIS accounts payable, purchasing and inventory functions to manage internal fuel distribution function.						
FLT-081	2	Fleet Management	Fueling	Track fuel used from external purchases.						
FLT-082	2	Fleet Management	Fueling	Track location (i.e. vendor, city, address, etc.) where fuel was purchased.						
FLT-083	2	Fleet Management	Fueling	Update the odometer reading and date fuel purchased on fleet/equipment master record.						
FLT-084	2	Fleet Management	Fueling	Maintain fueling history for each fleet/equipment unit with date, fuel tank and pump (if internal) or external provider and location and fuel usage.						
FLT-085	2	Fleet Management	Fueling	Provide capability to integrate with a third party automated fueling system to obtain fuel usage.						
FLT-086	2	Fleet Management	Fueling	Capture fuel ticket transactions for WVDOT gas pumps not part of an automated fuel management system.						
FLT-087	2	Fleet Management	Fueling	Integrate with and upload transactions from a fleet card system.						
FLT-088	2	Fleet Management	Fueling	Integrate with wvOASIS inventory function and/or third-party fuel management system.						
FLT-089	2	Fleet Management	Fueling	Provide for multiple agency specific mark-ups on fuel costs by agency subunit, fleet/equipment type, internal or external customer and other parameters.						
FLT-090	2	Fleet Management	Fueling	Integrate with wvOASIS accounts receivable and general ledger functions to generate intergovernmental billings for fuel purchases by one state agency from another state agency.						
FLT-091	2	Fleet Management	Fueling	Integrate with wvOASIS accounts receivable and billing functions to bill external customers for fuel purchases. External customers include local political subdivisions such as county sheriffs, etc.						
FLT-092	2	Fleet Management	Fueling	Alert the fleet/equipment unit operator and fleet class/fleet type owner by email of various transactions outside user-defined ranges (fuel type, fuel mileage, etc.).						
FLT-093	2	Fleet Management	Fueling	Provide report of fuel usage outside established business rules by fleet/equipment type.						
FLT-094	2	Fleet Management	Fueling	Calculate fuel economy (e.g. MPG) for current month, year-to-date, life-to-date and last year by agency, agency unit, maintenance shop, fleet class, fleet type, manufacturer, model and individual fleet/equipment unit.						
FLT-095	3	Fleet Management	Fueling	Calculate required state fuel taxes.						
FLT-096	3	Fleet Management	Fueling	Calculate federal fuel taxes.						
FLT-097	3	Fleet Management	Fueling	Calculate updates to vehicle cost per mile based on fueling entries.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-098	3	Fleet Management	Fueling	Provide ability for an authorized user with proper documentation and approvals based on business rules to adjust fuel purchases charged to one fleet unit which was really for other equipment (fuel for a chain saw bought with the fleet card assigned to the employees vehicle, etc.); provide exception report for all adjustments made.						
FLT-099	1	Fleet Management	General	Integrate with the wvOASIS Financial System to provide information on vehicles, maintenance equipment and other fleet units utilized in performing maintenance work activities.						
FLT-100	1	Fleet Management	General	Support vehicle and equipment usage rates.						
FLT-101	1	Fleet Management	General	Support specific repair codes/activities.						
FLT-102	1	Fleet Management	General	Support specific labor rates.						
FLT-103	1	Fleet Management	General	Support preventable maintenance schedules by fleet/equipment type and fleet/equipment unit.						
FLT-104	1	Fleet Management	General	Support owners of various types of fleet/equipment units.						
FLT-105	1	Fleet Management	General	Support workflows for work order, surplus property and other approvals.						
FLT-106	1	Fleet Management	General	Support management of one or multiple vehicle/equipment pools.						
FLT-107	1	Fleet Management	General	Integrate fleet and equipment management functions with other relevant wvOASIS functions, including but not limited to asset management, accounts payable, accounts receivable, general ledger, grants, inventory, project accounting, purchasing and time and labor.						
FLT-108	1	Fleet Management	General	Interface with wvOASIS cost accounting and allocation, inventory, personnel administration and time and labor to obtain the required actual cost data.						
FLT-109	1	Fleet Management	General	Track transfers. The transfers need to be two-way.						
FLT-110	1	Fleet Management	General	Restrict search capabilities by agency or agency unit based on the user's defined roles/responsibilities.						
FLT-111	1	Fleet Management	General	Integrate with the wvOASIS time and labor function to capture vehicle usage reported by an employee on their time sheet and update the fleet inventory information with mileage to date as appropriate.						
FLT-112	2	Fleet Management	General	Utilize available fleet/equipment information to compare needed versus actual equipment, costing of work orders and daily work accomplishments, and tracking condition and replacement needs.						
FLT-113	2	Fleet Management	General	Allow an authorized user to reserve equipment which is eligible to be pooled and reflect the reserved equipment in their crew schedules.						
FLT-114	2	Fleet Management	General	Calculate automatically equipment utilization and non-productive (commitment time) equipment hours by type of equipment, based on data input from crew leader's daily activity reports on equipment usage.						
FLT-115	2	Fleet Management	General	Allow an authorized user to create minimum usage requirements for specified equipment that will be set as a threshold for comparing planned usage versus actual usage.						
FLT-116	2	Fleet Management	General	Provide ability to restrict access to view units in fleet inventory by equipment class owner, equipment type owner and organization.						
FLT-117	2	Fleet Management	General	Provide capability to search the fleet/equipment inventory by multiple parameters including but not limited to VIN or other unique identifier, fleet/equipment type, manufacturer, make, model, miles driven, hours used, etc.						
FLT-118	2	Fleet Management	General	Restrict only to authorized user's information about fleet/equipment units defined as having special security.						
FLT-119	2	Fleet Management	General	Allow for re-numbering of fleet/equipment units and retain repair, fuel, accident and preventive maintenance histories.						
FLT-120	1	Fleet Management	Inventory	Store and track year manufactured.						
FLT-121	1	Fleet Management	Inventory	Store and track number of doors.						
FLT-122	1	Fleet Management	Inventory	Store and track optional attachments (minimum of 10).						
FLT-123	1	Fleet Management	Inventory	Store and track license tag (minimum of 2).						
FLT-124	1	Fleet Management	Inventory	Store and track fuel type (minimum of 3).						
FLT-125	1	Fleet Management	Inventory	Store and track fuel capacity.						
FLT-126	1	Fleet Management	Inventory	Store and track bucket/cubic yards.						
FLT-127	1	Fleet Management	Inventory	Store and track Gross Vehicle Weight Rating (GVWR).						
FLT-128	1	Fleet Management	Inventory	Store and track acquisition method (purchase, lease, donation, other).						
FLT-129	1	Fleet Management	Inventory	Store and track purchase date or lease effective date.						
FLT-130	1	Fleet Management	Inventory	Store and track unit received date.						
FLT-131	1	Fleet Management	Inventory	Support entry, tracking, and management of all types of fleet and equipment units in a single enterprise inventory.						
FLT-132	1	Fleet Management	Inventory	Track passenger vehicles.						
FLT-133	1	Fleet Management	Inventory	Track light duty trucks.						
FLT-134	1	Fleet Management	Inventory	Track passenger vans.						
FLT-135	1	Fleet Management	Inventory	Track construction equipment.						
FLT-136	1	Fleet Management	Inventory	Track maintenance equipment.						
FLT-137	1	Fleet Management	Inventory	Track trailers.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-138	1	Fleet Management	Inventory	Track agriculture equipment.						
FLT-139	1	Fleet Management	Inventory	Track other unique equipment classes/types defined by authorized users.						
FLT-140	1	Fleet Management	Inventory	Allow authorized users to define attributes that must be captured for each equipment class. For each equipment class, this includes required attributes and optional attributes.						
FLT-141	1	Fleet Management	Inventory	Allow system administrator or other authorized users to designate a equipment class owner.						
FLT-142	2	Fleet Management	Inventory	Store and track oil capacity.						
FLT-143	2	Fleet Management	Inventory	Store and track tire size, front.						
FLT-144	2	Fleet Management	Inventory	Store and track tire size, rear.						
FLT-145	2	Fleet Management	Inventory	Store and track transmission type.						
FLT-146	2	Fleet Management	Inventory	Store and track multiple engine types per fleet/equipment unit (gas, hybrid, electric, diesel).						
FLT-147	2	Fleet Management	Inventory	Store and track engine size.						
FLT-148	2	Fleet Management	Inventory	Store and track AVL/GIS transponder assigned to unit.						
FLT-149	2	Fleet Management	Inventory	Store and track toll transponder assigned to unit.						
FLT-150	2	Fleet Management	Inventory	Store and track optional equipment (multiple fields based on the fleet class and fleet equipment/type).						
FLT-151	2	Fleet Management	Inventory	Store and track other user defined fields by fleet class and fleet/equipment type (minimum of 20).						
FLT-152	2	Fleet Management	Inventory	Store and track warranty type by major unit component.						
FLT-153	2	Fleet Management	Inventory	Store and track warranty expiration date.						
FLT-154	2	Fleet Management	Inventory	Store and track warranty expiration in mileage.						
FLT-155	2	Fleet Management	Inventory	Store and track warranty expiration in time.						
FLT-156	2	Fleet Management	Inventory	Store and track other warranty terms definable by fleet class.						
FLT-157	2	Fleet Management	Inventory	Store and track annual license/permit renewals for vehicles and other motorized equipment separate from preventive maintenance services including license/permit type, date renewal is required and associated fees.						
FLT-158	2	Fleet Management	Inventory	Store and track a variety of attributes for each fleet/equipment unit (the specific attribute for each unit will vary by type).						
FLT-159	2	Fleet Management	Inventory	Store and track purchase order number.						
FLT-160	2	Fleet Management	Inventory	Store and track lease end date (if leased).						
FLT-161	2	Fleet Management	Inventory	Store and track location typically responsible for maintaining fleet/equipment unit – this could be a maintenance shop, a designation for external maintenance, etc.						
FLT-162	2	Fleet Management	Inventory	Store and track employee fleet/equipment unit is assigned to (if assigned to a specific employee).						
FLT-163	2	Fleet Management	Inventory	Store and track assigned fleet/equipment pool (if not assigned to a specific employee).						
FLT-164	2	Fleet Management	Inventory	Allow authorized users to add, maintain and delete fleet/equipment classes where a fleet class is a group of related types of fleet and equipment units such as passenger vehicles, light duty trucks, aircraft, rail equipment, construction equipment etc.						
FLT-165	2	Fleet Management	Inventory	Allow authorized users (Equipment class owners) to add, maintain and delete fleet/equipment types where a fleet/equipment type is a subcategory of related units within a class (for example four door passenger vehicles within the passenger vehicle class, etc.).						
FLT-166	2	Fleet Management	Inventory	Provide the ability for an authorized user to create templates for each specific fleet/equipment type to facilitate entry and maintenance of equipment units into the system.						
FLT-167	2	Fleet Management	Inventory	Allow system administrator or other authorized users to define user roles and responsibilities for each equipment type (add, maintain, delete units from inventory, transfer, perform/record maintenance, etc.).						
FLT-168	2	Fleet Management	Inventory	Integrate automatically with the West Virginia Board of Risk and Insurance Management (BRIM) to add new fleet/equipment record to BRIM SQL Server database or to update the BRIM database with changes recorded in wvOASIS.						
FLT-169	2	Fleet Management	Inventory	Provide the ability to assign add on components to a fleet/equipment unit.						
FLT-170	2	Fleet Management	Inventory	Integrate with wvOASIS purchasing function to automatically create initial fleet/equipment unit record upon receipt of vehicle populating initially with appropriate information available within wvOASIS purchasing function; authorized user must be able to then add additional information within the fleet/equipment unit record.						
FLT-171	2	Fleet Management	Inventory	Provide a minimum five (5) group assignments per fleet/equipment unit (e.g., agency, unit, location, etc.).						
FLT-172	2	Fleet Management	Inventory	Provide a minimum of three (3) user-defined meters per fleet or equipment unit.						
FLT-173	2	Fleet Management	Inventory	Provide a minimum of 12 add-fluid types per fleet/equipment unit.						
FLT-174	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for monthly or other recurring payments for leased vehicles; this could be a payment to an external entity or an intergovernmental transfer to another State agency.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-175	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for monthly or other recurring payments for financed vehicles.						
FLT-176	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for renewal of required licenses and permits.						
FLT-177	2	Fleet Management	Inventory	Maintain a history of any accidents associated with a fleet/equipment unit.						
FLT-178	2	Fleet Management	Inventory	Allow a fleet class owner for an agency to create a template for entering accidents for a specific fleet class and/or fleet/equipment type.						
FLT-179	2	Fleet Management	Inventory	Integrate with BRIM to automatically provide notification of accident and available information on the accident including attachment and transfer to BRIM of electronic files (pictures, police reports, estimates, etc.).						
FLT-180	2	Fleet Management	Inventory	Need ability to receive in rebuilt engines into inventory and have ability to credit a "misc" equipment identification number (ED#). Engine rebuilds have their own work orders and charges to those usually go to a "dummy" ED#.						
FLT-181	3	Fleet Management	Inventory	Store and track seating.						
FLT-182	3	Fleet Management	Inventory	Store and track color 1.						
FLT-183	3	Fleet Management	Inventory	Store and track color 2.						
FLT-184	3	Fleet Management	Inventory	Store and track width.						
FLT-185	3	Fleet Management	Inventory	Store and track height.						
FLT-186	3	Fleet Management	Inventory	Store and track length.						
FLT-187	3	Fleet Management	Inventory	Store and track wheelbase.						
FLT-188	3	Fleet Management	Inventory	Store and track number of axles.						
FLT-189	3	Fleet Management	Inventory	Store and track front or rear wheel drive axles.						
FLT-190	3	Fleet Management	Inventory	Store and track number of tires, front.						
FLT-191	3	Fleet Management	Inventory	Store and track number of tires, rear.						
FLT-192	3	Fleet Management	Inventory	Store and track engine cylinders.						
FLT-193	3	Fleet Management	Inventory	Store and track color 3.						
FLT-194	3	Fleet Management	Inventory	Integrate with the R.L. Polk and Company Vehicle Identification Number Analysis software to populate the fleet unit attributes to the extent possible.						
FLT-195	1	Fleet Management	Labor	Track both direct and indirect labor for each fleet/equipment unit.						
FLT-196	1	Fleet Management	Labor	Capture all labor transactions real-time as the mechanic logs on and off repairs.						
FLT-197	2	Fleet Management	Labor	Prepare efficiency reports which measure how a mechanic's performance compares with one or more user-defined standards. Reports must be able to be generated for the entire agency, a set of maintenance shops, a maintenance shop or for one or more mechanics for a user defined set of repair types and date range.						
FLT-198	3	Fleet Management	Labor	Provide the capability to view on-line work in progress, as well as all work completed that day by mechanic and location.						
FLT-199	3	Fleet Management	Labor	Produce labor averages by repair type and individual mechanic for a maintenance shop, set of maintenance shops.						
FLT-200	1	Fleet Management	Motorpool	Allow fleet units/equipment to be defined as a pool vehicle which can be reserved for use.						
FLT-201	1	Fleet Management	Motorpool	Capture and track all costs associated with each rental.						
FLT-202	1	Fleet Management	Motorpool	Allow additional costs to be added to each rental.						
FLT-203	1	Fleet Management	Motorpool	Provide the ability to define how the rental costs will be calculated to meet individual agency or motor pool specific needs, i.e., rental rate and CPM for excessive miles or rental rate of CPM for total miles, whichever is greater.						
FLT-204	2	Fleet Management	Motorpool	Provide capability to manage WVDOT motor pools.						
FLT-205	2	Fleet Management	Motorpool	Allow definition and set-up of an unlimited number of motor pools.						
FLT-206	2	Fleet Management	Motorpool	Define for each motor pool the employee units or groups of employee units which are eligible to reserve the fleet/equipment units in each motor pool.						
FLT-207	2	Fleet Management	Motorpool	Assign each pooled fleet /equipment unit to a specific motor pool.						
FLT-208	2	Fleet Management	Motorpool	Allow authorized users to view equipment availability by class, type, time in and time out and by rental location.						
FLT-209	2	Fleet Management	Motorpool	Allow vehicles to be reserved for future periods based on user defined rules with proper security authorization.						
FLT-210	2	Fleet Management	Motorpool	Capture reservation information including unit; an active/valid chart of account codes, grant or project to charge rental to; person requesting reservation; destination; employee operator name and driver license number; dispatched information; fleet unit number; rental charges; and pick-up site location.						
FLT-211	2	Fleet Management	Motorpool	Allow override of vehicle reservations with proper security authorization.						
FLT-212	2	Fleet Management	Motorpool	Generate reservation with a PIN# for key control purposes.						
FLT-213	2	Fleet Management	Motorpool	Support scheduling of an assigned pool vehicle/equipment unit for preventive maintenance.						
FLT-214	2	Fleet Management	Motorpool	Support billing for all rental charges, maintenance and operations costs on a single invoice.						
FLT-215	3	Fleet Management	Motorpool	Support user defined rental rate structure by fleet class and fleet type for hourly, daily, weekly, monthly and annual rentals.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-216	3	Fleet Management	Motorpool	Provide a rental rate structure which allows free miles or unlimited mites for each type of rental.						
FLT-217	1	Fleet Management	Parts Inventory	Maintain year to date and life to date history.						
FLT-218	1	Fleet Management	Parts Inventory	Provide on-line search capabilities of all parts by part type, agency part number, manufacturer's part number, alternate part number, and a user-defined alpha/numeric reference field. The search screen must also display minimum and maximum stocking levels and quantity on hand.						
FLT-219	2	Fleet Management	Parts Inventory	Integrate with the wvOASIS inventory function to maintain an inventory of an unlimited number of consumable inventory (parts, materials, other inventory).						
FLT-220	2	Fleet Management	Parts Inventory	Support set-up of multiple stock rooms or warehouse locations.						
FLT-221	2	Fleet Management	Parts Inventory	Provide the capability to integrate with bar code scanners to receive, transfer, adjust and charge out parts inventory.						
FLT-222	2	Fleet Management	Parts Inventory	Track information on the annual part usage, the type of usage, and the piece of equipment that the part is normally issued to.						
FLT-223	2	Fleet Management	Parts Inventory	Track the issuance of all stocked and non-stocked parts to a specific fleet unit or piece of equipment.						
FLT-224	2	Fleet Management	Parts Inventory	Allow for issuance of parts without having to charge it to a work order; instead parts must be charged to an active chart of account code, grant or project. Provide an audit trail and exception report of these situations.						
FLT-225	2	Fleet Management	Parts Inventory	Maintain inventory history including transfers and adjustments.						
FLT-226	2	Fleet Management	Parts Inventory	Track and record part transfers between shops or locations. Implement appropriate controls to ensure that transfers of parts are acknowledged by the sender and receiver and an exception report is provided for transfers not acknowledged and for any variance in quantities.						
FLT-227	2	Fleet Management	Parts Inventory	Provide a full range of audit tracking capabilities including any adjustment to unit cost, count, return to inventory, return to vendor, transfers, from one storeroom to another, by operator, and date/time.						
FLT-228	2	Fleet Management	Parts Inventory	Provide for an agency specific mark-up percent by part type and/or part number.						
FLT-229	1	Fleet Management	Parts Inventory	Integrate with wvOASIS to support frequent updates for quantity (On-hand, on-order, etc.), cost, location (warehouse/bin/stockpile) and related information to support the Fleet system having current updated inventory information in near real-time.						
FLT-230	1	Fleet Management	Parts Inventory	Integrate with wvOASIS to update consumable inventory (parts, materials and other inventory) consumed on work orders/repair orders.						
FLT-231	1	Fleet Management	Parts Inventory	Utilize inventory information to compare materials needed for scheduling materials on-hand, cost work orders and daily work accomplishments, and reorder materials when stock levels reach reorder points.						
FLT-232	1	Fleet Management	Parts Inventory	Track information on annual inventory usage, the type of usage, and the work activities the material or other item is normally issued for.						
FLT-233	1	Fleet Management	Parts Inventory	Track the issuance of all stocked and non-stocked inventory items to a specific asset or set of assets.						
FLT-234	1	Fleet Management	Parts Inventory	Store and display manufacturer part, material or item number.						
FLT-235	1	Fleet Management	Parts Inventory	Store and display item description.						
FLT-236	1	Fleet Management	Parts Inventory	Store locations and volumes of inventory items.						
FLT-237	2	Fleet Management	Parts Inventory	Display/report purchases and receipts by vendor for all parts, one or more types of parts or a specific part for the fiscal year or other user-defined time period.						
FLT-238	2	Fleet Management	Parts Inventory	Provide ability to change a part number and have that change be reflected for all historical data.						
FLT-239	2	Fleet Management	Parts Inventory	Allow merging of up to 20-part numbers into one-part number while retaining historical data.						
FLT-240	2	Fleet Management	Parts Inventory	Track activity on non-stocked parts to include frequency of issue and fiscal year-to-date information.						
FLT-241	2	Fleet Management	Parts Inventory	Price parts issued to work orders at a moving average.						
FLT-242	2	Fleet Management	Parts Inventory	Generate a surplus parts reports which can track lack of activity for user-defined periods of time.						
FLT-243	2	Fleet Management	Parts Inventory	Provide support for ABC classification of parts.						
FLT-244	2	Fleet Management	Parts Inventory	Support capability to track performance on a parts contract (actual cost per part vs. the contracted cost per part).						
FLT-245	1	Fleet Management	Preventative Maintenance	Track and identify fleet/equipment units and major components due for preventative maintenance (PM).						
FLT-246	1	Fleet Management	Preventative Maintenance	Generate a listing of fleet and equipment units and components that are due for maintenance based on user defined parameters.						
FLT-247	1	Fleet Management	Preventative Maintenance	Need forms and a weekly report for these.						
FLT-248	1	Fleet Management	Preventative Maintenance	Enter the labor/mechanic hours used to perform PM activities.						
FLT-249	2	Fleet Management	Preventative Maintenance	Notify electronically designated organization contacts, including the fleet/equipment unit operator and operator's supervisor, when the fleet unit or major components is under a factory recall.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-250	2	Fleet Management	Preventative Maintenance	Display trend analysis (agency, employee, fleet/equipment type) in regard to timeliness in response to scheduled PM's.						
FLT-251	2	Fleet Management	Preventative Maintenance	Schedule automatically preventative maintenance procedures for fleet and equipment units and components.						
FLT-252	2	Fleet Management	Preventative Maintenance	Need process for PM setups by Class and Inventory, and notifications for them. Notifications include when the PM is due and when it is complete.						
FLT-253	2	Fleet Management	Preventative Maintenance	Need process for In-house PM accomplishment.						
FLT-254	2	Fleet Management	Preventative Maintenance	Need tracking process for Commercial PM accomplishments using third-party vendor or P-Card.						
FLT-255	2	Fleet Management	Preventative Maintenance	Need hierarchical scheduling of preventive maintenance activities.						
FLT-256	2	Fleet Management	Preventative Maintenance	Create a PM repair order from a PM-due record.						
FLT-257	2	Fleet Management	Preventative Maintenance	Track inspections and emissions testing that is due and generate a report of test due within a user defined period of time.						
FLT-258	2	Fleet Management	Preventative Maintenance	Update automatically the next maintenance due date without any manual intervention based upon user-specified maintenance frequency.						
FLT-259	2	Fleet Management	Preventative Maintenance	Schedule and track maintenance on multiple vehicle components.						
FLT-260	2	Fleet Management	Preventative Maintenance	Enter the parts taken from in-house stock inventory.						
FLT-261	2	Fleet Management	Preventative Maintenance	Enter warranty information as needed.						
FLT-262	2	Fleet Management	Preventative Maintenance	Provide individual maintenance scheduling for each equipment component so that differences due to age, usage and manufacturer are accounted for.						
FLT-263	2	Fleet Management	Preventative Maintenance	Provide the capability to schedule unlimited maintenance activities per fleet or equipment unit.						
FLT-264	2	Fleet Management	Repairs	Maintain repair histories for both WVDOT and vendor repairs.						
FLT-265	2	Fleet Management	Repairs	Track and report costs (work and parts) for scheduled, unscheduled, road calls and accident maintenance.						
FLT-266	2	Fleet Management	Repairs	Provide ability to quickly reference complete equipment repair history without generating a report.						
FLT-267	2	Fleet Management	Repairs	Provide ability to search and query repair history by a number of user-defined parameters including fleet class, fleet type, manufacturer, fleet unit number, maintenance shop, repair date range, etc.						
FLT-268	2	Fleet Management	Repairs	Allow for transfer of fleet/equipment unit between organizations, while retaining repair, fuel and preventive maintenance histories for a user definable time period.						
FLT-269	1	Fleet Management	Reporting	Provide extensive standard management reports covering classes, types, fleet/equipment units, work orders, parts, operations cost, exception reports (utilization and CPA), and fleet/equipment replacement. These reports must be available with user defined options that will allow them to be V						
FLT-270	1	Fleet Management	Reporting	Provide a user-friendly ad-hoc reporting capability allowing for access to fleet/equipment unit inventory, work orders, preventive maintenance, repair history, fuel and other information within the wvOASIS fleet function.						
FLT-271	1	Fleet Management	Reporting	Provide ability for authorized users to execute pre-defined reports at the enterprise level, agency, units within agency and other user defined criteria.						
FLT-272	1	Fleet Management	Reporting	Provide optional report selection criteria to restrict the data by agency, class, type, whether equipment unit is active or has been transferred/retired/sent to surplus, shop/location, repair code (or any combination of these factors).						
FLT-273	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by agency or unit or program area.						
FLT-274	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by fleet/equipment unit location by multiple agency specific organizational parameters (for example regions, districts, counties, maintenance shop, parks, forests, etc.).						
FLT-275	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by fleet/equipment owner (individual or business unit for a pooled fleet/equipment unit).						
FLT-276	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments for fleet/equipment units which are on temporary loan including the owner of the fleet/equipment unit and the individual or business unit to whom the equipment is on loan to.						
FLT-277	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by assigned maintenance facilities.						
FLT-278	1	Fleet Management	Reporting	Prepare fleet/equipment unit report by various user defined parameters including- by class, by department, broken out by make, model, year, fuel type, GVW, engine type/size, transmission type, radio type or any other attribute of vehicle.						
FLT-279	1	Fleet Management	Reporting	Report on fleet/equipment unit status by active, salvaged, retained, reserved, etc.						
FLT-280	1	Fleet Management	Reporting	Provide a list of fleet/equipment units by location where assigned or loaned.						
FLT-281	1	Fleet Management	Reporting	Provide a fleet/equipment usage report showing vehicles driven a certain number of miles as defined by the user with no preventive maintenance.						
FLT-282	1	Fleet Management	Reporting	Provide a fleet/equipment usage report showing equipment utilized more than a certain number of hours as defined by the user with no preventive maintenance.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-283	1	Fleet Management	Reporting	Provide a report of fleet/equipment units with no activity/usage within a given time period.						
FLT-284	1	Fleet Management	Reporting	Prepare preventive maintenance reports for any combination of type and interval (monthly, quarterly, etc.).						
FLT-285	1	Fleet Management	Reporting	Report number of preventive maintenance operations performed in a given time period by fleet or equipment type.						
FLT-286	1	Fleet Management	Reporting	Provide life-to-date operational cost report per vehicle including by category including repair cost, operational cost, fuel cost, maintenance cost (labor and parts) and administrative cost.						
FLT-287	1	Fleet Management	Reporting	Provide cumulative fleet/equipment costs (current, year-to-date, life-to-date, last year cost figures).						
FLT-288	2	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments which are externally maintained.						
FLT-289	2	Fleet Management	Reporting	Provide for a replacement unit report including fleet and equipment units by type over certain time (hours) and/or mileage limits, used for budget forecasting.						
FLT-290	2	Fleet Management	Reporting	Provide an automated fueling system report, showing equipment information, refueling setting, fuel type, other cost and mileage.						
FLT-291	2	Fleet Management	Reporting	Provide a fuel card report, matching card and assigned vehicle.						
FLT-292	2	Fleet Management	Reporting	Prepare a component usage report showing components operated over a certain number of hours as defined by the user with no preventive maintenance.						
FLT-293	2	Fleet Management	Reporting	Prepare labor reports for any combination of the following: employee or work units for any given time period; repair/activity reason such as preventive maintenance, road call, breakdown, etc.; subassembly such as brakes, transmission, cooling system, etc; and repair type.						
FLT-294	2	Fleet Management	Reporting	Prepare a repair history report by component and by vendor supplying component.						
FLT-295	2	Fleet Management	Reporting	Prepare a report showing the number of scheduled and unscheduled work orders for a user defined time period.						
FLT-296	2	Fleet Management	Reporting	Prepare a report showing the number of work orders by reason, subassembly and/or repair type for a user defined time period.						
FLT-297	2	Fleet Management	Reporting	Prepare a report of open work orders by status, type and/or shop (pending, waiting parts, etc.).						
FLT-298	2	Fleet Management	Reporting	Prepare a report showing repeat work orders on the same unit for the last 30, 60 or 90 days.						
FLT-299	2	Fleet Management	Reporting	Provide equipment down type report by summary or detail for user defined time periods for location; class; type; preventive maintenance code; and down time reason.						
FLT-300	2	Fleet Management	Reporting	Provide a report of tire repair activity.						
FLT-301	2	Fleet Management	Reporting	Prepare oil and fluid report by summary or detail for user defined time periods by location; assigned maintenance facilities; fleet class/type; manufacturer, model and make; and preventative maintenance code.						
FLT-302	2	Fleet Management	Reporting	Generate warranty usage report including savings associated with warranty work.						
FLT-303	2	Fleet Management	Reporting	Prepare an accountability report that details all direct and indirect work by a mechanic and location for any user defined period.						
FLT-304	1	Fleet Management	Tires	Allow classification of tires by type (i.e., recap, airless, solid, etc.).						
FLT-305	1	Fleet Management	Tires	Track tire costs by type.						
FLT-306	1	Fleet Management	Tires	Track tire location by type including unit, position, scrap and staging.						
FLT-307	2	Fleet Management	Tires	Support comparison of tire makes and models.						
FLT-308	3	Fleet Management	Tires	Track tread wear by type.						
FLT-309	3	Fleet Management	Tires	Track tire performance by type.						
FLT-310	2	Fleet Management	Warranty Management	Support warranty tracking including warranty types, cycle (hours, days, years, miles) and length of cycle in time and/or miles.						
FLT-311	1	Fleet Management	Work Orders	Track equipment status changes (X,S,A,R,W,P). X=Down, S=Sale, A=Active, R=Repair, W=Warranty, and P=Pool.						
FLT-312	1	Fleet Management	Work Orders	Need to be printable/reportable.						
FLT-313	1	Fleet Management	Work Orders	Need to have closure process						
FLT-314	1	Fleet Management	Work Orders	Track regular and overtime labor.						
FLT-315	2	Fleet Management	Work Orders	Need non-formatted fields for additional notes.						
FLT-316	2	Fleet Management	Work Orders	Need drop down options						
FLT-317	2	Fleet Management	Work Orders	Mechanics need to be listed for assignment.						
FLT-318	2	Fleet Management	Work Orders	Allow Equipment Division to define, maintain and view repair codes including the repair code and a work description.						
FLT-319	2	Fleet Management	Work Orders	Allow Equipment Division or other authorized users to define rates for repair services by organization, employee, maintenance shop or skill within a maintenance shop.						
FLT-320	2	Fleet Management	Work Orders	Track general shop as well as individual mechanic labor rates.						
FLT-321	2	Fleet Management	Work Orders	Allow for assignment of individual overtime rates to each mechanic.						
FLT-322	2	Fleet Management	Work Orders	Provide capability to establish workflows for work request and job estimate review and approval based on user defined business rules and threshold levels.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-323	2	Fleet Management	Work Orders	Allow an operator of a fleet/equipment unit or authorized user to generate a work request for a required repair or service to a fleet/equipment unit.						
FLT-324	2	Fleet Management	Work Orders	Capture on work request the nature of the problem/service/repair and the criticality.						
FLT-325	2	Fleet Management	Work Orders	Allow work orders to be charged to an active grant, project or combination of chart of accounts codes.						
FLT-326	2	Fleet Management	Work Orders	Provide for a repairs-to-do lookup feature from repair order entry enabling user to add repair-to-do to existing repair order.						
FLT-327	2	Fleet Management	Work Orders	Support driver notes to the mechanic of a minimum of 240 characters per work request.						
FLT-328	2	Fleet Management	Work Orders	Provide the ability to attach various file types to the work request/work order.						
FLT-329	2	Fleet Management	Work Orders	Route work order request for a service or repair to the operator's supervisor or other authorized user for approval based on business rules.						
FLT-330	2	Fleet Management	Work Orders	Route work order automatically to the appropriate maintenance shop for review, estimating and assignment based on maintenance shop designated in the fleet inventory or other user defined business rules.						
FLT-331	2	Fleet Management	Work Orders	Allow for re-assignment of work order between maintenance shops or to an external repair vendor.						
FLT-332	2	Fleet Management	Work Orders	Capture estimated cost (labor, parts, other costs) for a work order.						
FLT-333	2	Fleet Management	Work Orders	Support multiple repair types on a work order (such as the inclusion of a warranty repair on a PM work order), while still allowing detailed analysis by repair type.						
FLT-334	2	Fleet Management	Work Orders	Provide a mechanism to red flag repairs caused by the negligence of others (i.e. traffic accidents, vandalism, etc.) The party determined at fault must be able to then be billed for these repairs.						
FLT-335	2	Fleet Management	Work Orders	Integrate with BRIM to automatically report the estimated repair costs associated with accidents.						
FLT-336	2	Fleet Management	Work Orders	Allow for automated routing of work order back to operator (requestor) and/or operator's supervisor for approval of the estimate and generation of the work order.						
FLT-337	2	Fleet Management	Work Orders	Allow the maintenance shop supervisor to view each mechanic's current work queue in a maintenance shop including assigned jobs, estimated completion times for each job and estimated availability time.						
FLT-338	2	Fleet Management	Work Orders	Allow a maintenance shop supervisor to identify options for assignment of a work order based on skill set and level of mechanic.						
FLT-339	2	Fleet Management	Work Orders	Allow a maintenance shop supervisor to assign and automatically route via a work flow a work order to a mechanic within the maintenance shop.						
FLT-340	2	Fleet Management	Work Orders	Allow the maintenance shop supervisor to adjust the priority of a work order moving a work order up in the mechanics work queue.						
FLT-341	2	Fleet Management	Work Orders	Support multiple mechanics on a single repair order.						
FLT-342	2	Fleet Management	Work Orders	Create or automatically generate work orders based on user defined business rules (preventive maintenance schedules, warranty check, inspections, etc.).						
FLT-343	2	Fleet Management	Work Orders	Notify via email the assigned operator or designated owner of the fleet/equipment unit of automatically generated work orders.						
FLT-344	2	Fleet Management	Work Orders	Generate work orders for external repairs.						
FLT-345	2	Fleet Management	Work Orders	Allow for e-mail or fax of repair tickets directly to vendors.						
FLT-346	2	Fleet Management	Work Orders	Provide the capability to integrate with management systems of multiple outsourced maintenance providers to electronically transfer work order information.						
FLT-347	2	Fleet Management	Work Orders	Route assigned work orders automatically via workflow to the mechanics work queue.						
FLT-348	2	Fleet Management	Work Orders	Allow mechanic to log start time on a job by selecting it from their work queue through online entry or scanning a printed bar code on a printed work order form.						
FLT-349	2	Fleet Management	Work Orders	Identify and display all warranties and preventive maintenance as part of a work order.						
FLT-350	2	Fleet Management	Work Orders	Generate part list and maintenance procedures with the work orders.						
FLT-351	2	Fleet Management	Work Orders	Auto create the parts requisition with the work order.						
FLT-352	2	Fleet Management	Work Orders	Allow a mechanic to perform data entry of parts utilized, parts returned to inventory and other information through scanning of bar codes on the parts, etc.						
FLT-353	2	Fleet Management	Work Orders	Allow mechanic to indicate work order completion.						
FLT-354	2	Fleet Management	Work Orders	Allow authorized user to review and approve work order as completed.						
FLT-355	2	Fleet Management	Work Orders	Prevent further changes to a work order after approval. Further changes will require an additional transaction against the work order so that the audit trail of changes is maintained.						
FLT-356	2	Fleet Management	Work Orders	Allow a work order to be credited to allow for both current and past errors.						
FLT-357	2	Fleet Management	Work Orders	Provide work order search capability by a number of parameters including equipment identification number (ED#), maintenance shop, status (open, closed, cancelled), date range, work order type, fleet/equipment type, make, model, etc.						
FLT-358	2	Fleet Management	Work Orders	Restrict work order search capability and access to work orders by a user's roles/responsibilities.						
FLT-359	2	Fleet Management	Work Orders	Allow for partially complete repair orders that remain open through month and year end without starting new repair order.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-360	2	Fleet Management	Work Orders	Allow authorized users to credit repairs on an existing repair order without deleting when data entry mistakes are made.						
FLT-361	2	Fleet Management	Work Orders	Update employee time information in the wvOASIS time and labor function based on the actual time reported by the employee on the work order. Total time for an employee for each day should be pre-populated on the time sheet based on the total time charged to work orders that day.						
FLT-362	2	Fleet Management	Work Orders	Update parts inventory in wvOASIS inventory function based on parts used on a work order.						
FLT-363	2	Fleet Management	Work Orders	Update parts inventory in wvOASIS inventory function based on any parts credited in a work order (returned to inventory).						
FLT-364	2	Fleet Management	Work Orders	Track maintenance against the warranty associated with each piece of equipment and/or components.						
FLT-365	2	Fleet Management	Work Orders	Capture cost avoidance information associated with maintenance against the warranty work performed on each vehicle and each piece of equipment and/or components.						
FLT-366	2	Fleet Management	Work Orders	Print warranty tracking and labels at time of repair.						
FLT-367	2	Fleet Management	Work Orders	Update equipment costs with recovered warranty dollars.						
FLT-368	2	Fleet Management	Work Orders	Integrate with wvOASIS accounts payable function to support payment for completed work orders via procurement card or warrant for external repairs and intergovernmental billing for repairs performed by one State agency for another agency.						
FLT-369	2	Fleet Management	Work Orders	Integrate with wvOASIS general ledger function to support intergovernmental billing for repairs performed by one State agency for another agency.						

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Data Fields

Req. #	Priority	Category	Sub-Category	Data Field Requirement	Vendor Response	Customization Estimate, if Applicable	Core Module(s)	Comments/Notes
FDF-001	1	Fleet Management	General	Store and display fleet/equipment class name, code, and description.				
FDF-002	1	Fleet Management	General	Store and display skills/certifications required by operator.				
FDF-003	1	Fleet Management	General	Store and display rental rate, cost per hour (for activity costing purposes).				
FDF-004	1	Fleet Management	General	Store Utilization entry.				
FDF-005	1	Fleet Management	General	Store and display fleet/equipment class name, code, and description.				
FDF-006	1	Fleet Management	General	Store and display skills/certifications required by operator.				
FDF-007	1	Fleet Management	General	Store and display rental rate, cost per hour (for activity costing purposes).				
FDF-008	1	Fleet Management	General	Store Utilization entry.				
FDF-009	2	Fleet Management	General	Store warranties for equipment and parts.				
FDF-010	1	Fleet Management	Inventory	Store and display fleet/equipment type name and class code.				
FDF-011	1	Fleet Management	Inventory	Store and display fleet/equipment unit ID number.				
FDF-012	1	Fleet Management	Inventory	Store and display manufacturer.				
FDF-013	1	Fleet Management	Inventory	Store and display make.				
FDF-014	1	Fleet Management	Inventory	Store and display model.				
FDF-015	1	Fleet Management	Inventory	Store and display serial number (16 to 20 alpha-numeric characters).				
FDF-016	1	Fleet Management	Inventory	Store and display USDOT number.				
FDF-017	1	Fleet Management	Inventory	Store and display 7 Digit ED number (WVDOT assigned equipment number) with possibility for expansion on the field.				
FDF-018	1	Fleet Management	Inventory	Store at least 30 preventive maintenance schedules applicable to each fleet/equipment unit; preventive maintenance schedules must be supported for time, miles/hours, fuel consumed, or any combination of all three.				
FDF-019	1	Fleet Management	Inventory	Store and display assigned organization.				
FDF-020	1	Fleet Management	Inventory	Store and display current location of equipment.				
FDF-021	1	Fleet Management	Inventory	Store and display prior history of equipment assignment.				
FDF-022	1	Fleet Management	Inventory	Store and display eligibility of the equipment to be pooled.				
FDF-023	1	Fleet Management	Inventory	Store and display fleet/equipment type name and class code.				
FDF-024	1	Fleet Management	Inventory	Store and display fleet/equipment unit ID number.				
FDF-025	1	Fleet Management	Inventory	Store and display manufacturer.				
FDF-026	1	Fleet Management	Inventory	Store and display make.				
FDF-027	1	Fleet Management	Inventory	Store and display model.				
FDF-028	1	Fleet Management	Inventory	Store and display serial number (16 to 20 alpha-numeric characters).				
FDF-029	1	Fleet Management	Inventory	Store and display USDOT number.				
FDF-030	1	Fleet Management	Inventory	Store and display prior history of equipment assignment.				
FDF-031	2	Fleet Management	Inventory	Store a minimum of 5 major component makes, models and serial #s per fleet/ equipment unit (e.g., chassis, engine).				
FDF-032	2	Fleet Management	Inventory	Store at least 15 warranties applicable to each fleet/equipment unit or major subcomponent of the fleet/equipment unit; warranties must be supported for time, miles or any combination of the two.				
FDF-033	2	Fleet Management	Inventory	Store unlimited notes for each fleet/equipment unit record.				
FDF-034	2	Fleet Management	Inventory	Store lease/rental information for any equipment which is leased.				
FDF-035	2	Fleet Management	Inventory	Store vendor identification number for lessor for external leases.				
FDF-036	2	Fleet Management	Inventory	Store lease term.				
FDF-037	2	Fleet Management	Inventory	Store lease start date.				
FDF-038	2	Fleet Management	Inventory	Store lease end date.				
FDF-039	2	Fleet Management	Inventory	Store lease payment terms (lease amount, period).				
FDF-040	2	Fleet Management	Inventory	Store lease payment due date.				
FDF-041	2	Fleet Management	Inventory	Store financing information for any fleet units which are financed.				
FDF-042	2	Fleet Management	Inventory	Store accidents involving a fleet unit.				
FDF-043	2	Fleet Management	Inventory	Store date of accident.				
FDF-044	2	Fleet Management	Inventory	Store employee operating fleet/equipment unit.				
FDF-045	2	Fleet Management	Inventory	Store other employees in fleet unit or working with equipment.				
FDF-046	2	Fleet Management	Inventory	Store accident description.				
FDF-047	2	Fleet Management	Inventory	Store names/contact information of non-State employees involved in incident/accident.				
FDF-048	2	Fleet Management	Inventory	Store work orders (multiple) associated with any repairs.				
FDF-049	2	Fleet Management	Inventory	Store other optional fields based on fleet class and/or fleet/equipment type.				
FDF-050	2	Fleet Management	Inventory	Store and display separate fields for Home and Controlling Organizations.				
FDF-051	2	Fleet Management	Inventory	Store and display warranty information and any recall history.				
FDF-052	2	Fleet Management	Inventory	Store and display repair history.				
FDF-053	2	Fleet Management	Inventory	Store and display history of equipment utilization.				

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Data Fields

FDF-054	2	Fleet Management	Inventory	Store and display current equipment status (Active, Pooled, Reserved, Under Repair, Scheduled for Maintenance, etc.) - X,S,A,R,W,P. X=Down, S=Sale, A=Active, R=Repair, W=Warranty, and P=Pool				
FDF-055	2	Fleet Management	Inventory	Store and display combined current equipment status of equipment units which are needed to be reserved as a unit; for example, a loader and hauler.				
FDF-056	2	Fleet Management	Inventory	Store a minimum 3 fuel types per fleet/equipment unit.				
FDF-057	2	Fleet Management	Inventory	Store work orders (multiple) associated with any repairs.				
FDF-058	2	Fleet Management	Inventory	Store and display warranty information and any recall history.				
FDF-059	3	Fleet Management	Inventory	Store vendor identification number for bank or finance company.				
FDF-060	3	Fleet Management	Inventory	Store loan date.				
FDF-061	3	Fleet Management	Inventory	Store loan start and end date.				
FDF-062	3	Fleet Management	Inventory	Store loan terms (rate, period, payment).				
FDF-063	3	Fleet Management	Inventory	Store loan payment due date.				
FDF-064	3	Fleet Management	Inventory	Store organization to whom loan payment is made (bank or other).				
FDF-065	3	Fleet Management	Inventory	Store loan payment location.				
FDF-066	3	Fleet Management	Inventory	Store loan payment address.				
FDF-067	2	Fleet Management	Motorpool	Store for each motor pool: unique motor pool identifier.				
FDF-068	2	Fleet Management	Motorpool	Store for each motor pool: unit.				
FDF-069	2	Fleet Management	Motorpool	Store for each motor pool: motor pool manager.				
FDF-070	2	Fleet Management	Motorpool	Store for each motor pool: pool location.				
FDF-071	2	Fleet Management	Motorpool	Store for each motor pool: unique motor pool identifier.				
FDF-072	2	Fleet Management	Motorpool	Store for each motor pool: unit.				
FDF-073	2	Fleet Management	Motorpool	Store for each motor pool: motor pool manager.				
FDF-074	2	Fleet Management	Motorpool	Store for each motor pool: pool location.				
FDF-075	1	Fleet Management	Parts Inventory	Store part type code.				
FDF-076	2	Fleet Management	Parts Inventory	Store part number.				
FDF-077	2	Fleet Management	Parts Inventory	Store manufacturer.				
FDF-078	2	Fleet Management	Parts Inventory	Store manufacturer part number.				
FDF-079	2	Fleet Management	Parts Inventory	Store serial number.				
FDF-080	2	Fleet Management	Parts Inventory	Store alternate part number.				
FDF-081	2	Fleet Management	Parts Inventory	Store description.				
FDF-082	2	Fleet Management	Parts Inventory	Store part usage codes (multiple).				
FDF-083	2	Fleet Management	Parts Inventory	Store part reference fields (multiple).				
FDF-084	2	Fleet Management	Parts Inventory	Store cross reference fields (multiple).				
FDF-085	2	Fleet Management	Parts Inventory	Store part usage codes (multiple).				

WVDOT Fleet Management and Equipment Management Requirements Matrix
Management Reporting Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-001	1	Management Reporting	General	Provide a wide range of pre-defined reports that support day-to-day fleet management, work management and planning and budgeting business functions. Reports should be able to be scheduled and automatically generated and distributed (pushed to the user) by the operational system at a user defined time for publication.						
RPT-002	2	Management Reporting	General	Provide capability to copy and modify existing reports as the basis for a new report.						
RPT-003	2	Management Reporting	General	Provide tools within the Vendor solution to configure new reports.						
RPT-004	3	Management Reporting	General	Provide an ad-hoc query tool within the Vendor solution. The adhoc query toolset within the Vendor solution will not require knowledge and training on its own proprietary language for the majority of users (non power users).						
RPT-005	2	Management Reporting	General	Provide the ability to utilize JasperReports with the EAMS database						
RPT-006	3	Management Reporting	General	Provide the ability to integrate other third-party reporting tools (Crystal Reports, PowerBI, etc.) with the Vendor solution.						
RPT-007	2	Management Reporting	General	Provide an entity relationship diagram(s) to support development of end-user reports through the ad-hoc query tool within the Vendor solution or a third-party reporting application.						
RPT-008	2	Management Reporting	General	Provide ability to view key performance indicators and other organizational performance data on a user-friendly intuitive dashboard.						
RPT-009	1	Management Reporting	General	Provide the capability to integrate with a future WVDOT business intelligence environment.						
RPT-010	1	Management Reporting	General	Provide a solution which is architected to support the ability to have 24-hour/7 day a week access (excluding defined maintenance windows) to the reporting functions.						
RPT-011	2	Management Reporting	General	Provide user access to predefined reports available withinthe Vendor solution without requiring the installation of any client software.						
RPT-012	2	Management Reporting	General	Provide user access to the functionality of the adhoc query tool for a minimum of 80% of the available functionality without requiring the installation of any client software (it is recognized that some capabilities utilized by power users may require the installation of additional software on the client desktop).						
RPT-013	2	Management Reporting	General	Provide user access to the forecasting capabilities within the Vendor solution for a minimum of 50% of the available forecasting capabilities without requiring the installation of any client software.						
RPT-014	2	Management Reporting	General	Provide user access to analysis, modeling and dashboarding tools within the Vendor solution for a minimum of 50% of the available capabilities within these functions without requiring the installation of any client software.						
RPT-015	1	Management Reporting	General	Leverage the roles and security definitions that will be deployed for the main Fleet Management product within the reporting and business function to minimize duplication of security administration functions.						
RPT-016	2	Management Reporting	General	Support utilization of the same hardware and operating system specifications (architectural landscape) that are required for the operational platform for the reporting environment to the extent feasible.						
RPT-017	2	Management Reporting	General	Provide a reporting solution which is architected to allow sizing of data repositories to meet changing business needs allowing clients and servers to be added, upgraded or removed as computing capacity needs change, without reconfiguring the operational system or reporting environment.						
RPT-018	2	Management Reporting	Report Portal	Provide users with a personalized report portal that allows access to only those reports that the user is authorized to see consistent with role-based security definitions.						
RPT-019	3	Management Reporting	Report Portal	Display on the reports portal a list of reports that have been distributed to the user (i.e. the user has been granted authorization to view a report by the designated report publisher/owner).						
RPT-020	3	Management Reporting	Report Portal	Display on the reports portal a list of saved personalized reports and ad-hoc queries that the user has authority to either create or modify in the user's personal reports list.						
RPT-021	3	Management Reporting	Report Portal	Allow users to search existing reports inventory and subscribe to reports after requesting and receiving permission from the report owner/publisher.						
RPT-022	3	Management Reporting	Report Portal	Provide the ability for designated report publishers to un-publish reports to individual users or groups of users, with the un-publication subject to approval based on WVDOT business rules.						
RPT-023	3	Management Reporting	Report Portal	Allow end-users to share saved personalized reports and ad-hoc queries for use by another user.						

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-024	3	Management Reporting	Report Portal	Allow end-users to delete shared reports from their personal reports list without deleting the shared report from another user's personal reports list.						
RPT-025	3	Management Reporting	Report Portal	Allow users to refresh (run) saved personal reports or ad-hoc queries from the portal with an option to run in the background and send a notification to the user upon completion.						
RPT-026	3	Management Reporting	Standard Report Features	Allow users to execute reports and modify report query parameters on-line and allow users to save modified report parameter sets as personal versions without impacting the base query.						
RPT-027	2	Management Reporting	Standard Report Features	Provide drill down capability from summary information to the supporting detail transactions and drill up from the detail transaction to the summary information.						
RPT-028	2	Management Reporting	Standard Report Features	Provide, as part of drill down functionality, the ability to print the expanded sections of the drill down results with the content of the original query results.						
RPT-029	3	Management Reporting	Standard Report Features	Link the report generator directly to the data dictionary to provide point and click data item selection and drag-and-drop formatting by the user.						
RPT-030	3	Management Reporting	Standard Report Features	Allow users to define or modify the sort order of reports.						
RPT-031	3	Management Reporting	Standard Report Features	Allow users to search for data, transactions or documents using a range of data values.						
RPT-032	3	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform a search within a report output/results set.						
RPT-033	3	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform searches with full "if..then..else" logic within a report output/results set.						
RPT-034	4	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform free-form text searching within a report output/results set. Search capability shall include the specification of words that are in a given range of words and shall include embedded, attached or linked documents.						
RPT-035	2	Management Reporting	Standard Report Features	Present data in both tabular and graphical formats.						
RPT-036	3	Management Reporting	Standard Report Features	Provide reporting and analytical capabilities with a similar user interface/user experience to the extent practical as other Fleet Management system functions (reporting toolset should not have a significantly different look and feel to the end-user from other parts of the Vendor system).						
RPT-037	3	Management Reporting	Standard Report Features	Provide ability to allow the results from any online search or query performed within the Vendor solution to be printed.						
RPT-038	2	Management Reporting	Standard Report Features	Provide standard print capabilities such as those typically available in Windows-based products such as print preview, print a range of pages, print a number of copies, etc.						
RPT-039	2	Management Reporting	Standard Report Features	Provide ability to schedule a report to run automatically if certain conditions (business rules) are met.						
RPT-040	2	Management Reporting	Standard Report Features	Support export of query and report results as an external database (for example in Microsoft Access or SQL Server readable formats).						
RPT-041	2	Management Reporting	Standard Report Features	Support export of query and report results in a variety of different industry standard formats including but not limited to .xls or .xlsx, .doc or .docx, PDF, .txt, XML, ASCII, comma delimited, tab delimited, etc.						
RPT-042	3	Management Reporting	Standard Report Features	Provide for report distribution based on events, process milestones, or predefined data thresholds or values, e.g., based on data values contained within the report (i.e., conditional operators >, <, =, etc.)						
RPT-043	3	Management Reporting	Standard Report Features	Provide the capability to integrate third party report distribution software solutions.						
RPT-044	3	Management Reporting	Standard Report Features	Provide functionality to distribute reports by a variety of methods such as sending links to reports via email, web, fax, or PDA.						
RPT-045	3	Management Reporting	Standard Report Features	Support effective date selection and query including Boolean operations such as date ranges.						

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-046	3	Management Reporting	Standard Report Features	Provide functionality for the user to incorporate formulas, functions, and mathematical calculations into reports as well as typical grouping, mathematical and statistical functions on data in reports (such as sum, count, average, etc.)						
RPT-047	3	Management Reporting	Standard Report Features	Provide the ability to create and specify report templates.						
RPT-048	3	Management Reporting	Standard Report Features	Provide wizards to guide the users through report building steps.						
RPT-049	3	Management Reporting	Standard Report Features	Provide cursor selection and drag-and-drop features to assist users in formatting of files, elements, and operands (e.g., +,-, /, *) from data dictionary or other pre-established lists.						
RPT-050	3	Management Reporting	Standard Report Features	Provide graphical report layout tools and drag-and-drop features to assist users in formatting reports and inquires.						
RPT-051	3	Management Reporting	Standard Report Features	Provide support for graphical data visualization features including but not limited to stacked bar charts, min/mid/max line graphs, regression lines, dashboard gauges, etc.						
RPT-052	3	Management Reporting	Standard Report Features	Provide ability to link from reporting tool to Microsoft Office graphic, spreadsheet and presentation applications.						
RPT-053	3	Management Reporting	Ad-hoc Query	Allow users to build ad-hoc queries to report on any fields in the Vendor solution for which they are authorized using one or more of a combination of different criteria; provide online access to a data dictionary showing data element and table to assist query building.						
RPT-054	3	Management Reporting	Ad-hoc Query	Allow a user to save an ad-hoc query for later execution without impacting any base query that was used as a start point.						
RPT-055	3	Management Reporting	Ad-hoc Query	Display a user's saved ad-hoc queries by descriptive name on the user's report portal.						
RPT-056	3	Management Reporting	Ad-hoc Query	Allow a user to authorize one or more additional users to have access to a saved ad-hoc query through the report portal.						
RPT-057	3	Management Reporting	Ad-hoc Query	Display any ad-hoc queries that are authorized (shared) by one user for use by a second user on the second user's report portal.						
RPT-058	2	Management Reporting	Ad-hoc Query	Provide ability to track data by user-defined performance indicators.						
RPT-059	2	Management Reporting	Report Administration	Provide a solution architected so as to centrally manage the reporting tool set to ensure that any updates are distributed to users and that all users are accessing the same version of the reporting software.						
RPT-060	1	Management Reporting	Report Administration	Ensure solution is architected so system performance is not impacted when a large report or inquiry is being run.						
RPT-061	3	Management Reporting	Report Administration	Provide the ability to schedule, view and modify the start time for batch printing including any dependencies on certain business conditions or events; provide option to restrict batch printing of large volume outputs by job or to certain authorized users to minimize on paper usage.						
RPT-062	1	Management Reporting	Report Administration	Enable users to run ad hoc reports and queries without degradation of system performance.						
RPT-063	2	Management Reporting	Report Administration	Allow the system administrator or other authorized user to define limits on the execution time for a report or query and/or the numbers being retrieved.						
RPT-064	2	Management Reporting	Report Administration	Cancel automatically a query or report job if it fails to meet system administrator defined criteria (e.g., time limits, infinite loops, excessive pages, etc.).						
RPT-065	2	Management Reporting	Report Administration	Provide the ability for authorized users or system administrator to terminate any query or report that significantly reduces system performance.						
RPT-066	3	Management Reporting	Report Administration	Allow system administrator or other authorized user to override parameters for an individual query or report.						
RPT-067	3	Management Reporting	Report Administration	Provide functionality to audit exports of report data and modifications to report definitions.						
RPT-068	2	Management Reporting	Report Administration	Provide the ability to configure reports such that information can be suppressed based on a user's role.						
RPT-069	2	Management Reporting	Report Administration	Provide reports on user production statistics by user ID, time of day, length of job, etc. to determine who is viewing a report, what reports are being used and resources consumed by department/user suitable for billing purposes.						
RPT-070	2	Management Reporting	Report Administration	Maintain an active metadata repository that contains definitions of all data elements and attributes within the Vendor'ssolution (maintain both product meta-data and user configured changes).						

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core Module(s)	Third Party Solution(s)	Comments/Notes
APP-001	1	Application Architecture	General	Provide a suite of fully-integrated application modules in which data captured in one module is readily available for use and updated as appropriate in other modules of the system.						
APP-002	1	Application Architecture	General	Provide ability to share all related business information across functional areas and organizations, subject to application security and user-defined business rules and security considerations.						
APP-003	1	Application Architecture	General	Provide an integrated data management structure that is utilized across the proposed software solution minimizing system processing or administration required on the data integration points.						
APP-004	1	Application Architecture	General	Provide user-controlled definition and maintenance of system values and business rules in tables, system configuration files, coding, and business rules in data structures and interfaces without requiring programmer intervention to modify and providing the capability for an application administrator or other authorized users to manage and maintain system configurations, settings, and data tables.						
APP-005	2	Application Architecture	General	Update all related modules and tables immediately with a single entry; that is, any change to a project attribute or project status information is made only once but takes effect throughout the system.						
APP-006	2	Application Architecture	General	Provide means of altering tables and/or data structures to support user-defined fields and capability for system administrator or other authorized users to create new data items on-line and automatically update a global data dictionary with these new elements.						
APP-007	2	Application Architecture	General	Provide application administrator or other authorized user with screen layout configuration capabilities including movement of fields on the screen and/or across tables, removal of fields, addition of user-defined fields, reorder or consolidation of tables, buttons to enable prints and selection of related reports, links to other business objects (such as CAD drawings, user manuals, project records, contract records, etc.)						
APP-008	2	Application Architecture	General	Support consistency in terms of field labels such that a screen label defined in one place would be referred to in the same way everywhere and separated by line of business, role, etc.						
APP-009	2	Application Architecture	General	Within the system, utilize a design which provides the end user with a perspective of real-time update of data (even if some processes may be happening in the background to complete database updates); that is, users should not be required to toggle back and forth from a screen being used to perform a business process using a job queue to check the status of a batch/background task being able to proceed to the next screen in a series of screens required to perform a specific business function/task.						
APP-010	2	Application Architecture	General	Perform transactions in real-time in the sense that online access will display the most current element value (e.g., if a user changes the value of a data element on one screen, the newly changed data value will be shown when the user moves to another screen with that same data element).						
APP-011	1	Application Architecture	General	Edit all system input according to user-defined business rules so that the rules are appropriately and consistently applied and data is validated at the time the data is entered into the system (on-line or via a batch transaction).						
APP-012	2	Application Architecture	General	Utilize effective-dated transactions and table updates (either dated for future action or dated to be retroactive) with the ability to specify data edits by type of transaction.						
APP-013	2	Application Architecture	General	Support multiple concurrent application sessions for each user; each concurrent session must be able to support the same security profile or a different profile if the user has multiple profiles.						
APP-014	2	Application Architecture	General	Provide capability for a user to have multiple screens or tabs open within a single user session.						
APP-015	2	Application Architecture	General	Maintain security logs and audit trails distinctly for each concurrent user session.						
APP-016	2	Application Architecture	General	Support encryption, masking, or hiding of any fields with restricted access to only authorized users by department/business unit and role and responsibility.						
APP-017	2	Application Architecture	General	Provide capability to indicate at the field level user classes or individual users who are authorized to view masked or encrypted fields.						
APP-018	2	Application Architecture	General	Allow display of masked, hidden, or encrypted fields by an authorized user.						
APP-019	1	Application Architecture	General	Comply with the Rehabilitation Act of 1973 and Americans with Disabilities Act (ADA) Section 508 standards for accessibility of all system functions.						
APP-020	1	Application Architecture	User Interface	Utilize a consistent user interface across the software (excluding proposed third party solutions) including user definable hot keys; screen naming functions; navigation patterns; consistent use of controls; and online help and menus (as defined by the user's security profile).						
APP-021	2	Application Architecture	User Interface	Ensure messages appear in a consistent format across all system functions for both batch and on-line processing.						
APP-022	2	Application Architecture	User Interface	Allow manual entry and also context specific drop-down lists of all valid values for each validated field where appropriate.						
APP-023	2	Application Architecture	User Interface	Provide immediate transfer/paste of value[s] from a "pop up" list of values tables to the appropriate field when selected.						
APP-024	2	Application Architecture	User Interface	Architect so as to have interfaces proceed directly and automatically to the next appropriate field when data is entered, for example "Tabbing" through fields in a defined sequence.						
APP-025	2	Application Architecture	User Interface	Allow user to directly access other input screens and modules without need for backing out of menus or menu paths.						
APP-026	2	Application Architecture	User Interface	Allow navigation between multiple, related input screens without losing any information input on the original (or header) screen.						
APP-027	2	Application Architecture	User Interface	Allow user to move backward within a menu structure and screens without losing previously entered data.						
APP-028	2	Application Architecture	User Interface	Allow a user to cancel transaction and/or exit any document or screen without saving changes.						
APP-029	1	Application Architecture	User Interface	Support cut and paste for copying data between screens.						
APP-030	2	Application Architecture	User Interface	Provide a display that indicates (e.g., highlighting) all required fields for entry on any screen.						

APP-031	2	Application Architecture	User Interface	Provide a search and filter capability on user screens containing columns of data.						
APP-032	2	Application Architecture	Functions and Features	Support use of keyboard data entry only (i.e., allow screen functions to be performed without use of a mouse).						
APP-033	1	Application Architecture	Functions and Features	Support the generation of email messages by the system based on various system/business events utilizing SMTP for outbound messages.						
APP-034	2	Application Architecture	Functions and Features	Allow any master record or validation table entry to be activated or inactivated.						
APP-035	1	Application Architecture	Functions and Features	Provide for wildcard, partial, and multi-term searches: Include ability to define must-have and optional criteria.						
APP-036	2	Application Architecture	Functions and Features	Provide capability to auto-populate the value of a field based on the value of a previously entered field using user-defined business rules and/or validations.						
APP-037	2	Application Architecture	Functions and Features	Allow overriding of system or user-defined defaults based on business rules with an audit trail within individual functions.						
APP-038	2	Application Architecture	Functions and Features	Allow for descriptions on all transactions.						
APP-039	2	Application Architecture	Functions and Features	Provide/support spell check capability.						
APP-040	2	Application Architecture	Functions and Features	Support text formatting in the system (i.e., the ability to support mixed case letters, word wrap, line wrap, and character count when there is a limit, etc.)						
APP-041	2	Application Architecture	Functions and Features	Provide query features that supports alternate field lookup (e.g., using item name to look up item code or project name to look-up project number).						
APP-042	2	Application Architecture	Functions and Features	Provide table look-up fields that can be linked to or refer to other tables.						
APP-043	2	Application Architecture	Functions and Features	Utilize effective and expiration dates to version reference tables and data.						
APP-044	1	Application Architecture	Functions and Features	Provide capability to add, change, and inactivate reference tables in both batch and on-line mode.						
APP-045	2	Application Architecture	Functions and Features	Provide capability to recognize and capture rejected (bypassed) transactions for review, correction and reprocessing: Place batch loaded reference data into a suspended state if errors exist in non-key fields. This process should be non-blocking and the processing should continue.						
APP-046	2	Application Architecture	Functions and Features	Provide capability to perform cross-reference table validations.						
APP-047	1	Application Architecture	Functions and Features	Support use of "digital signatures" or "online approvals" to initiate or approve a business event within the system using user authentication within the system via validation of user credentials at the time the user signed on to the system; Support these digital signatures for approvals and rejections of workflow tasks.						
APP-048	2	Application Architecture	Functions and Features	Provide ability to integrate with third-party eSignature solutions to support electronic signature approval processes initiated within the software solution.						
APP-049	2	Application Architecture	Functions and Features	Support mass changes to defined groups of transactions or data with appropriate audit trail.						
APP-050	2	Application Architecture	Functions and Features	Provide capability to review and approve a batch load prior to execution.						
APP-051	2	Application Architecture	Functions and Features	Provide capability to back out (rollback) previously executed batch loads.						
APP-052	2	Application Architecture	Functions and Features	Provide capability to define/set-up batch checkpoints.						
APP-053	2	Application Architecture	Functions and Features	Provide a sequential unique identifier for a batch process.						
APP-054	3	Application Architecture	Functions and Features	Support ability to add printable and non-printable notes to any field or document.						
APP-055	2	Application Architecture	Functions and Features	Support creation of user-defined form letters or business forms using system-defined naming standards configurable by the system administrator or authorized user.						
APP-056	2	Application Architecture	Functions and Features	Provide capability to set-up standard document and letter templates at the department/business unit level for use throughout the system with names, titles, labels, pre-defined backgrounds, etc. using system-defined naming standards configurable by the system administrator or authorized user.						
APP-057	2	Application Architecture	Functions and Features	Provide automatic date and time stamping of all documents generated by the system.						
APP-058	2	Application Architecture	Functions and Features	Provide functionality to copy a document in order to create a new document of the same type.						
APP-059	2	Application Architecture	Functions and Features	Generate special clauses on documents as defined by users or by standard clauses.						
APP-060	2	Application Architecture	Functions and Features	Provide ability to view multiple different file formats for attachment in all modules/functions including, but not limited to, Microsoft Office products, PDF's, and image file formats.						
APP-061	2	Application Architecture	Functions and Features	Support ability to use the "print screen" function on any screen.						
APP-062	1	Application Architecture	Functions and Features	Provide ability for authorized end-users to import from a .xls, csv, or a text file meeting import formatting requirements.						
APP-063	1	Application Architecture	Workflows	Provide tools to model and modify pre-existing workflows or create new workflows (the workflows shall be implementable globally or by specific business units).						
APP-064	1	Application Architecture	Workflows	Support establishment of user-defined rules-based workflows for any system event or transaction.						
APP-065	2	Application Architecture	Workflows	Provide bi-directional electronic routing of documents for approval or other tasks through workflow.						
APP-066	2	Application Architecture	Workflows	Support routing of workflow to multiple destinations based on various user-defined criteria.						
APP-067	2	Application Architecture	Workflows	Integrate with Active Directory to access organizational hierarchies and incumbent information for current employees in order to establish workflow routings.						
APP-068	2	Application Architecture	Workflows	Support parallel approvals and single-threaded approvals in the same approval path.						
APP-069	2	Application Architecture	Workflows	Reverse any approvals and return the workflow transaction to the originating user and any other users who had previously approved the transaction in the event that one or more reviewers disapproves a transaction.						
APP-070	2	Application Architecture	Workflows	Allow workflow destination to be defined as specific users or a class of users or by using some other user-defined criteria.						
APP-071	1	Application Architecture	Workflows	Allow for copying/extending preconfigured workflows to meet specific business requirements.						

APP-072	1	Application Architecture	Workflows	Support definition of workflow events based on user-defined criteria including transaction code; department/business unit; user roles and responsibilities; user position in organization; data values and other user-defined values or parameters.						
APP-073	2	Application Architecture	Workflows	Allow user-defined standard approval timeframes.						
APP-074	2	Application Architecture	Workflows	Allow user-defined alternative approval paths.						
APP-075	1	Application Architecture	Workflows	Support multiple levels of approvals for transactions based on profile security and other user-defined criteria.						
APP-076	1	Application Architecture	Workflows	Allow a user to enter descriptive information in a note field or to upload and attach a file (Microsoft Office, Microsoft Office 365, PDF, JPEG, etc.) to content items within the workflow and store these notes with user id and date/time stamp.						
APP-077	2	Application Architecture	Workflows	Allow workflows to be designated as either 'informational' or 'action (such as approval) required.						
APP-078	2	Application Architecture	Workflows	Ensure a transaction is not finalized until all required approval workflows are complete.						
APP-079	2	Application Architecture	Workflows	Allow a workflow to be designed to support either simultaneous actions or require consecutive actions, as defined by an authorized user.						
APP-080	1	Application Architecture	Workflows	Provide a dashboard which displays the status of workflows including workflows pending for a user-defined period of time.						
APP-081	1	Application Architecture	Workflows	Provide capability for personnel, or their supervisors to delegate their approval authority to another individual or work group, along with allowing the delegate to access their "inbox" should that be desired by the user. This function is primarily to allow for coverage when an employee is out on leave.						
APP-082	2	Application Architecture	Workflows	Provide email notification of workflow items.						
APP-083	2	Application Architecture	Workflows	Provide capability to allow an application system administrator to authorize a user to be able to opt in/opt out of email notifications.						
APP-084	2	Application Architecture	Workflows	Allow user with appropriate authorization to disable email notification (opt in/opt out capability).						
APP-085	2	Application Architecture	Workflows	Provide integrated workflow error handling.						
APP-086	2	Application Architecture	Workflows	Track workflow approvals and rejections.						
APP-087	1	Application Architecture	Workflows	Support various user-defined transaction statuses, including approved, rejected, pending, under consideration, etc.						
APP-088	1	Application Architecture	Workflows	Provide for the display of the status of items submitted to a workflow at any time.						
APP-089	1	Application Architecture	Workflows	Maintain document status based on routing and approvals and allow authorized users to determine where the document is in the routing process.						
APP-090	2	Application Architecture	Workflows	Notify users automatically via email when items in their "inbox" have gone unprocessed for a user-defined period of time.						
APP-091	2	Application Architecture	Workflows	Route transactions automatically to a workgroup after a specific time of inaction (based on user-defined criteria).						
APP-092	2	Application Architecture	Workflows	Allow steps in the workflow to be bypassed by allowing approvers higher in the approval chain to approve transactions. Should this transaction be in the "inbox" of an approver lower in the approval chain automatically remove transaction from lower approver's inbox.						
APP-093	2	Application Architecture	Workflows	Support the use of a "master approver" for each workflow who may approve a transaction at any time whether included in the normal workflow or not.						
APP-094	1	Application Architecture	Mobile Technology	System should be "mobile-friendly" for mobile platforms/environments including iOS and Android.						
APP-095	1	Application Architecture	Mobile Technology	Utilize responsive design to ensure that web pages display accurately on a range of screen sizes and aspect ratios including smart phones, desktops, tablets, etc.						
APP-096	1	Application Architecture	Security	Comply with WVDOT and any applicable State of West Virginia security policies.						
APP-097	1	Application Architecture	Security	Comply with encryption requirements in Internal Revenue Service Publication 1075.						
APP-098	1	Application Architecture	Security	Comply with Federal Information Processing Standard (FIPS) 140 or most current.						
APP-099	1	Application Architecture	Security	Comply with ISO/IEC 15408: Common Criteria for Information Technology Security Evaluation.						
APP-100	1	Application Architecture	Security	Support digital certificates.						
APP-101	1	Application Architecture	Security	Support public key infrastructure (PKI).						
APP-102	1	Application Architecture	Security	Support Transport Layer Security (TLS) > 1.2.						
APP-103	1	Application Architecture	Security	Provide an efficient, flexible way to control and administer access to all components of the solution using role-based security.						
APP-104	1	Application Architecture	Security	Provide role-based security and privileges and access rights by position and department/business unit.						
APP-105	1	Application Architecture	Security	Provide granular management and administrator control over transactions, forms access, field updates, row locking, interfacing events, data queries and other types of authorizations using role-based security.						
APP-106	1	Application Architecture	Security	Provide capability to establish "security profiles" or templates by user-defined job category or role, and to apply the templates to individuals and to user groups to grant privileges.						
APP-107	1	Application Architecture	Security	Restrict display of system functions upon sign-in to the software to only the options, functions, menu selections, screens, and data fields to which the user or business unit has rights to.						
APP-108	1	Application Architecture	Security	Provide ability to ensure that if two or more distinct security roles are needed to perform a business function and all needed roles are held by the same user, the user must log on separately under each security role in order to perform the full business transaction. Further, if a user has approval privileges over a business process that they also enter data for, the user shall NOT be able to approve their own work or requests. User-generated work or requests must be approved by a different/independent approver (such as a supervisor).						
APP-109	1	Application Architecture	Security	Provide ability for the system within the security function of the application to allow an authorized user to configure available controls, actions, and access for interfaces based upon user role / privileges.						

APP-110	1	Application Architecture	Security	Integrate with Active Directory to define users to the system, including following user information: unique user identification; user first name; user last name; department/business unit; user email address; and effective date of user access to the system.						
APP-111	1	Application Architecture	Security	Allow the system administrator or other authorized users to define user access groups based on job responsibilities to ensure separation of duties; the system administrator must be able to define a group name, a description of the role and capabilities of the user group. Additional fields may be offered for further separation, finer grouping.						
APP-112	1	Application Architecture	Security	Integrate with Active Directory to obtain user groups and assignments of users to those groups. Provide capability to grant user groups access to each system function and establish the type of access to be allowed (add, change, inquire, delete) along with an effective start and end date for this access.						
APP-113	1	Application Architecture	Security	Allow system administrator, or other authorized user, to assign users to one or more user groups including an effective-date and optional end-date for inclusion in each user group.						
APP-114	1	Application Architecture	Security	Allow system administrator or other authorized users to remove users from one or more user groups including recording of an effective date for end of inclusion in each user group.						
APP-115	2	Application Architecture	Security	Log incidents of invalid password attempts which exceed a system-configurable maximum allowable number of attempts capturing user identification entered, type of violation (invalid user id, invalid password or invalid id and password) and date and time of the violation; place the incident log in the audit trail log.						
APP-116	2	Application Architecture	Security	Log incidents of security violations within the system capturing user identification, IP address with X-Forward IP if load balancer is involved, system function for which unauthorized access was attempted and date and time of security violation.						
APP-117	2	Application Architecture	Security	Allow the system administrator or authorized users to generate a formatted user-defined report of invalid password attempts or security violations within the system.						
APP-118	2	Application Architecture	Security	Provide an online function for review of the logs of invalid password attempts or security violations by the system administrator or other authorized users.						
APP-119	1	Application Architecture	Security	Ensure report and ad-hoc query results are subject to the system security model such that users cannot access data through reports and queries for which they are not authorized in the operational system.						
APP-120	1	Application Architecture	Security	Support access to the software solution by authorized third-party business partners through VPN or VDI technology, subject to WVDOT and state of West Virginia security procedures for external access.						
APP-121	1	Application Architecture	Security	Provide capability for the system to allow users to choose from a list of security roles (user or group based) if the user has more than one role available to them.						
APP-122	2	Application Architecture	Security	Provide capability for the system administrator or an authorized user to delegate proxy roles to other users with an expiration date, and provide capability to notify user of the new proxy; Start and end dates shall be within 30 calendar days of each other.						
APP-123	1	Application Architecture	Security	Allow system administrator or other authorized user to define the allowable period for user inactivity while logged on; such time shall be consistent with WVDOT and State of West Virginia security policy.						
APP-124	1	Application Architecture	Security	Disconnect or log out a user session when it exceeds the allowable period of inactivity as established by the system administrator and configured in the system.						
APP-125	2	Application Architecture	Security	Warn user that they will be disconnected before automatically logging user out of the system.						
APP-126	1	Application Architecture	Security	Ensure security on report creation or distribution software so that a user cannot view/create a report containing data that they are not authorized to see within the system.						
APP-127	1	Application Architecture	Audit Trail	Maintain an audit trail of all user actions that update and access the database including at a minimum user id, action performed, and time/date stamp; this includes any update via online, batch, web services or self-service functions.						
APP-128	1	Application Architecture	Audit Trail	Provide a standardized audit trail format / row for each data structure (whether that's a table row or document depending on database type) in the system and track information including but not limited to: timestamp when the record was inserted, changed or deleted; user id or program id inserting, changing or deleting the record; copy of record before change/deletion; and copy of record after addition/change.						
APP-129	1	Application Architecture	Audit Trail	Provide an audit trail for each interface program which shows: user or program initiating an interface, the date and time of interface execution and the interface completion status (Completed, Completed with Errors, Cancelled, Ended with Errors, etc.).						
APP-130	2	Application Architecture	Archiving	Provide reporting and analysis tools which guide a system data administrator in determining which data is appropriate and safe to archive.						
APP-131	2	Application Architecture	Archiving	Provide capability to store specific data elements for an indefinite period of time while other data may be able to be archived after user-defined periods based on record retention policies.						
APP-132	2	Application Architecture	Archiving	Provide authorized user with ability to mark (and unmark) records for deletion but not removed database until archived.						
APP-133	2	Application Architecture	Archiving	Provide capability to purge, archive, and restore inactive records based on user-defined criteria and tracking history.						
APP-134	2	Application Architecture	Archiving	Allow system administrator to define archiving criteria for different types of data.						
APP-135	2	Application Architecture	Archiving	Provide an automated archiving routine that archives data following the user-defined archiving rules; the process shall be able to be scheduled or manually initiated by an authorized user.						
APP-136	2	Application Architecture	Archiving	Provide for restoration of archived data by various parameters including the date range of the archiving process and other user-defined business rules.						
APP-137	2	Application Architecture	Archiving	Provide a flexible, automated archival routine to archive inactive reference data; this archival routine must validate that other table entries do not use the inactive data before archiving it and maintain overall system referential data integrity.						
APP-138	1	Application Architecture	Help	Provided a centrally stored and maintained system wide help function.						
APP-139	1	Application Architecture	Help	Provide context-sensitive, field-level on-line help features for all screen elements, screen errors, and error codes.						
APP-140	2	Application Architecture	Help	Utilize an on-line help feature which directs the user either to a help screen specific to the field they are on if help is available for that field or to a help screen which is specific to the screen they are on if no field level help is available.						
APP-141	1	Application Architecture	Help	Provide table-driven error message handling.						

APP-142	1	Application Architecture	Help	Allow authorized users to modify and maintain error message text.						
APP-143	2	Application Architecture	Help	Ensure an error message points the user to the field in error (e.g., by identifying the field name, field number or providing a link to tab to the field).						
APP-144	2	Application Architecture	Help	Provide capability to identify processing or navigation path for a screen.						
APP-145	2	Application Architecture	Help	Allow customization of help files provided with the system by the application system administrator or other authorized users to incorporate WVDOT-wide or business unit/department specific information.						
APP-146	2	Application Architecture	Help	Allow customization of help files by the system administrator or other authorized user by department/business unit or by roles and responsibilities within the proposed system: users must be able to modify the part of the help text that they are authorized to maintain without impacting other help text.						
APP-147	2	Application Architecture	Help	Ensure all customized help text and files carry forward automatically during system updates and upgrades.						
APP-148	1	Application Architecture	User Documentation	Provide user documentation that is comprehensive, clear and easy to use (e.g., user documentation must provide quick answers to questions regarding the navigation of application screens, execution of pre-defined reports, and use of the ad-hoc query capability); it must also contain clear and thorough descriptions of all screen and batch processing functions, screen data, programs, system reports, and any processing parameters.						
APP-149	1	Application Architecture	User Documentation	Provide all system documentation and manuals electronically.						
APP-150	1	Application Architecture	User Documentation	Provide search functions for on-line documentation, across all documentation and within component pieces of the on-line documentation.						
APP-151	2	Application Architecture	User Documentation	Allow system administrator to authorize components of the system documentation to be available for download by authorized users.						
APP-152	2	Application Architecture	User Documentation	Provide capability to allow authorized users to download user documentation approved by the system administrator for distribution as one or multiple PDF files.						
APP-153	2	Application Architecture	User Documentation	Enable users to incorporate user-defined documentation into system documentation (e.g., user procedures, business rules, etc.), which is accessible in the same manner as documentation from the software provider.						
APP-154	2	Application Architecture	User Documentation	Support version control for user-defined documentation.						
APP-155	1	Application Architecture	Upgradeability	Provide capability for all upgrade and patched processes for the system to automatically re-apply configurations and customizations made by WVDOT / Should these customizations/configurations have to manually be re-applied, the system shall identify these exceptions for manual re-application before applying any upgrade/patch software).						

REQUEST FOR PROPOSAL

WVDOT FLEET AND EQUIPMENT MANAGEMENT SYSTEM RFP
CRFP DOT22*01

Attachment B: Cost Proposal Template

West Virginia Department of Transportation

CRFP No. DOT22*01

General Instructions

Vendor must indicate on the Cost Summary Sheet whether their proposal is a On-Premise or SaaS solution and complete either the On-Premise tab or the SaaS solution tab depending on its proposed deployment approach. Vendors proposing an On-Premise solution additionally need to provide additional data on the Cost Summary Sheet for columns identified as "D. Unit Price" and "E. Discount %" (not needed for SaaS solution), which are highlighted in light orange. Vendor should complete the deliverable pricing schedule. On the customizations tab, the Vendor should separately list out the cost of each customization identified in the Fleet and Equipment Management Requirements matrix. The total cost for customizations on this tab should tie out to the customization deliverable line on the deliverables tab. On the Managed Services tab, the Vendor should include the cost of providing the required 12 months of production support and the cost of two optional one-year production support periods. On the rate sheet, the Vendor should enter rates by classification which will be utilized as the basis for negotiating any required change orders during the contract period.

West Virginia Department of Transportation

RFP No. CRFP DOT22*01 - Cost-Price Proposal

Cost Summary

Select On-Premise or SaaS Solution, set one to "Y" and one to "N"		
If On-Premise solution, provide the additional fields D. Unit Price, E. Discount % (not needed for SaaS solution)		
On-Premise Solution?	N	Y = On-Premise Solution, Any other Value represents a SaaS Solution

Offeror: _____

1. Software - Core Solution	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
			0	$ -	0%	$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Software Subtotal	$ -

2. Third Party Products	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
			0	$ -	0%	$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Third Party Subtotal	$ -

3. Services		Total Price
Implementation (from **Implementation Tab**)		$ -
	Impl Services Subtotal	$ -

PROPOSED 4. Ongoing Costs	A. Base-Implementation	B. Base-Post Production	C. Option Term	D. Total Price (A+B+C)
Annual SaaS Subscriptions	$ -	$ -	$ -	$ -
Annual Third Party SaaS Subscription	$ -	$ -	$ -	$ -
SaaS-Application Managed Services		$ -	$ -	$ -
			Ongoing Costs Subtotal	$ -

Total Contract Price (Sum of Subtotals of Section 3 and 4 only)	$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Fleet Implementation Services

Offeror: _____

1. Deliverables/Miletones	A. Total Price
Project Work Plan	$ -
Project Kick-off Meeting	$ -
Project Management Plan	$ -
Quality Management Plan	$ -
Knowledge Transfer Plan	$ -
Stakeholder Engagement Plan	$ -
Organizational Change Management Plan	$ -
Master Test Plan	$ -
Data Conversion Plan	$ -
Interface Plan	$ -
Training Plan	$ -
Go-Live Deployment Plan	$ -
Post Go-Live Plan	$ -
System Detailed Design Document (SDDD)	$ -
Security Plan	$ -
Requirements Traceability Matrix	$ -
Configured Software	$ -
Unit Tested Interface Programs	$ -
Unit Tested Conversion Programs	$ -
Mock Data Conversion 1	$ -
Mock Data Conversion 2	$ -
Unit Tested Custom Objects (Forms, Reports, Workflows) - ***ties to Customizations Subtotal for Fleet***	$ -
System Test Report	$ -
Integration Test Report	$ -
Security Test Report	$ -
Performance Test Report	$ -
User Acceptance Test Report	$ -
Training Materials	$ -
Training Course Pilot (pre User Acceptance Test)	$ -
End-user Training	$ -
Enterprise Readiness Plan	$ -
OCM Support/Materials per approved plan	$ -
Cut-over to Production	$ -
Acceptance	$ -
Fleet Services Subtotal	**$ -**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Customization Cost - Complete By Phase for Each Item in Requirements Matrix Classifed as Customization or Third-Party Customization

Offeror: _____

Customization Name/Description	Requirement #	Complexity	Price
Fleet Customizations			
			$ -
			$ -
			$ -
			$ -
Add Lines Above As Required			$ -
		Total Cost, Fleet Customizations	**$ -**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
On-Premise
Annual Software Maintenance

Offeror: _____

1. Annual Software Maintenance - Core Solution	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Maintenance: Implementation	$ -		Software Maintenance: Post-Production Base Contract		$ -

1. Annual Software Maintenance - Core Solution	Post Production Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Maintenance - Post Production Options			$ -

1. Annual Software Maintenance - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Maintenance: Implementation	$ -		Software Maintenance: Post-Production Base Contract		$ -

1. Annual Software Maintenance - Third Party	Post Production Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Maintenance - Post Production Options			$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
SaaS Solution
Annual Software Subscriptions

Offeror: _____

1. Annual Software Subscription	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Subscription - Implementation		$ -	Software Subscription - Post Production Base Contract		$ -

1. Annual Software Subscription	Post Production - Options		
	2026	2027	Total Price
=A12	$ -	$ -	$ -
=A13	$ -	$ -	$ -
Software Subscription - Post Production Options			$ -

1. Annual Software Subscription - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Subscription - Implementation		$ -	Software Subscription - Post Production Base Contract		$ -

1. Annual Software Subscription - Third-Party	Post Production - Options		
	2026	2027	Total Price
=A27	$ -	$ -	$ -
=A28	$ -	$ -	$ -
Software Subscription - Post Production Options			$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
All Solutions
Application Managed Services

Offeror: _____

1. Application Managed Services	Base	Options Period	
	2023	2024	2025
	$ -	$ -	$ -

Application Managed Services-Base	$ -	Appl Managed Services-Options Period	$ -

Total Price - Managed Services	$ -

WVDOT Fleet System
CRFP No. DOT22*01
RATE SHEET

Offeror: _____

Instructions: Vendors shall complete and submit this Rate Sheet. Vendors shall include billing rates for key staff that may provide professional services under this contract. Billing Rates shall be fully-burdened and include overhead, other direct costs and profit. These rates shall be used as a basis for the purchase of additional professional services under this Contract.

Item No.	Role	Role Description	Unit	Billing Rate
1			Hour	$
2			Hour	$
3			Hour	$
4			Hour	$
5			Hour	$
6			Hour	$
7			Hour	$
8			Hour	$
9			Hour	$
10			Hour	$
11			Hour	$
12			Hour	$
13			Hour	$
14			Hour	$
15			Hour	$

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: _____

Authorized Signature: _____ Date: _____

State of _____

County of _____, to-wit:

Taken, subscribed, and sworn to before me this ___ day of _____, 20___.

My Commission expires _____, 20___.

AFFIX SEAL HERE

NOTARY PUBLIC _____

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

Pursuant to *W. Va. Code* § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of $1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

"Interested party" or *"Interested parties"* means:

(1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
(2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
(3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

Revised June 8, 2018

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

(Required by *W. Va. Code* § 6D-1-2)

Name of Contracting Business Entity: _____ **Address:** _____

_____

Name of Authorized Agent: _____ **Address:** _____

Contract Number: _____ **Contract Description:** _____

Governmental agency awarding contract: _____

☐ **Check here if this is a Supplemental Disclosure**

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting busine entity for each category below *(attach additional pages if necessary)*:

1. **Subcontractors or other entities performing work or service under the Contract**
   ☐ Check here if none, otherwise list entity/individual names below.

2. **Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities**
   ☐ Check here if none, otherwise list entity/individual names below.

3. **Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding lega services related to the negotiation or drafting of the applicable contract)**
   ☐ Check here if none, otherwise list entity/individual names below.

Signature: _____ Date Signed: _____

Notary Verification

State of _____, County of _____:

I, _____, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this _____ day of _____, _____.

_____
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

Revised June 8, 2018

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002	**Reason for Modification:**
Doc Description: Addendum No 3 - FLEET MANAGEMENT SYSTEM	Addendum No. 3 - to provide responses to timely submitted questions and move the bid opening to 09/23/2021.
Proc Type: Central Master Agreement	

Date Issued	Solicitation Closes	Solicitation No	Version
2021-09-13	2021-09-23 13:30	CRFP 0803 DOT2200000001	4

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM NO. 3

1. To provide responses to vendor questions timely submitted, however, were inadvertently omitted from Addendum No. 2 issued 09/03/2021.

2. To extend the bid opening from 09/16/2021 to 09/23/2021 at 1:30 pm.

ONLINE RESPONSES FOR THIS SOLICITATION ARE PROHIBITED Please see Section 6 entitled BID SUBMISSION for more information.

No other changes.

INVOICE TO	SHIP TO
DIVISION OF HIGHWAYS OFFICE OF THE SECRETARY 1900 KANAWHA BLVD E, BLDG 5 RM A109 CHARLESTON WV 25305-0440 US	DIVISION OF HIGHWAYS EXECUTIVE DIVISION 1900 KANAWHA BLVD E, BLDG 5 CHARLESTON WV 25305-0430 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	DEVELOPMENT IMPLEMENTATION SUPPORT FLEET MGT SYSTEM				

Comm Code	Manufacturer	Specification	Model #
43233701			

Extended Description:
SOFTWARE DEVELOPMENT, INSTALLATION, SUPPORT AND TRAINING

Attachments A and B revised on Addendum No. 2 issued 9/3/2021

SEE ATTACHMENTS.

SCHEDULE OF EVENTS

Line	Event	Event Date

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: CRFP DOT2200000001
Addendum Number: 3

The purpose of this addendum is to modify the solicitation identified as CRFP DOT2200000001 ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[X] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[X] Other

Description of Modification to Solicitation:

1. To provide response to vendor questions submitted timely, however, were inadvertently omitted from Addendum No. 2 issued on 9/3/2021. See attached pages.

2. The bid opening has moved from 09/16/2021 to 09/23/2021. The bid opening time remains at 1:30 pm.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

CRFP DOT2200000001
ADDENDUM NO. 3

QUESTIONS:

Q1: **Is any GIS integration required? For example for locating accidents. It is listed in the RFP under 4.2.2.3.8. Technical Specification but not in the requirement spreadsheet State of WV have any ETL tools which can be leveraged for Data mapping and Transformation? What is the vendor expectation with regards to ETL tool?**

A1: WVDOT requires the Vendor's proposed Fleet Management solution to have the *capability* to integrate with the WVDOT GIS environment to allow for future integration, but there is no specific requirement to integrate the Fleet Management System with the WVDOT GIS environment as part of the initial implementation.

Q2: **Are we expected to write the SOP's for fleet maintenance or only to tailor them to the VPS.**

A2: The awarded Vendor will be responsible for providing input to WVDOT on what tailoring of SOPS will be required based on the capabilities of the Vendor's proposed Fleet Management solution.

Q3: **For the SRA what kind of assets need to be managed : rolling stock, wayside equipment and rails?**

A3: The new Fleet Management System must be able to support the SRA's rolling stock, work equipment and light duty trucks, passenger cars, etc. SRA infrastructure assets will be managed in the Transportation Asset Management System or TAMS, which is built on the Deighton dTIMS solution.

Q4: **RPT-044 Can you explain what is the functionality required for the distribution of reports by web or pda (Is this Mobile Device)? State of WV have any ETL tools which can be leveraged for Data mapping and Transformation? What is the vendor expectation with regards to ETL tool?**

A4: The intent of the requirement is to be able to publish a link via a variety of channels or mechanisms to provide a link to an authorized user to allow them to be able to view a report online.

Q5: **Do you work in single or multiple shifts?**

A5: Both. There is typically one shift during standard operations, but there will be multiple shifts during snow and ice operations.

Q6: **APP-052: Can you give an example of what is required for this functionality? (Provide capability to define/set-up batch checkpoints)**

A6: APP-052 refers to the ability to set-up restart or sync points in a batch job. In the event of an error, all processing prior to the checkpoint would synchronize or commit to the database, while steps after the checkpoint could be in an error state.

Q7: 4.2.2.4 Federal Highway Administration Certification: Is this required or will billing to FHWA be done using wvOASIS?

A7: The actual billing of FHWA is performed through wvOASIS. However, FHWA reserves the right to review downstream systems which generate transactions which are charged to a project and potentially eligible for billing. To the extent FHWA desires to review or better understand how fleet charges which may be billed to a Federal project are initiated in the Fleet Management System and then flow over to wvOASIS, the Vendor will be expected to support WVDOT in answering these types of information requests from FHWA.

OTHER INFORMATION:

1. The bid opening has moved from 09/16/2021 to 09/23/2021. The bid opening time remains at 1:30 pm.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP DOT2200000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[ ]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

_____
Company

_____
Authorized Signature

_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002	**Reason for Modification:**
Doc Description: Addendum No 2 - FLEET MANAGEMENT SYSTEM	Addendum No. 2
Proc Type: Central Master Agreement	

Date Issued	Solicitation Closes	Solicitation No	Version
2021-09-03	2021-09-16 13:30	CRFP 0803 DOT2200000001	3

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM NO. 2

1. Responses to vendor questions attached.
2. To extend the bid opening from 09/09/2021 to 09/16/2021 at 1:30 pm.
3. Attachments A and B have been revised and attached to unlock some protected fields in the previous attachments.

ONLINE RESPONSES FOR THIS SOLICITATION ARE PROHIBITED Please see Section 6 entitled BID SUBMISSION for more information.

No other changes.

INVOICE TO	SHIP TO
DIVISION OF HIGHWAYS OFFICE OF THE SECRETARY 1900 KANAWHA BLVD E, BLDG 5 RM A109 CHARLESTON WV 25305-0440 US	DIVISION OF HIGHWAYS EXECUTIVE DIVISION 1900 KANAWHA BLVD E, BLDG 5 CHARLESTON WV 25305-0430 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	DEVELOPMENT IMPLEMENTATION SUPPORT FLEET MGT SYSTEM				

Comm Code	Manufacturer	Specification	Model #
43233701			

Extended Description:
SOFTWARE DEVELOPMENT, INSTALLATION, SUPPORT AND TRAINING

Attachments A and B revised on Addendum No. 2 issued 9/3/2021

SEE ATTACHMENTS.

SCHEDULE OF EVENTS

Line	Event	Event Date

SOLICITATION NUMBER: CRFP DOT2200000001
Addendum Number: 2

The purpose of this addendum is to modify the solicitation identified as CRFP DOT2200000001 ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[X] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[X] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[X] Other

Description of Modification to Solicitation:

1. The bid opening has moved from 09/09/2021 to 09/16/2021. The bid opening time remains at 1:30 pm.

2. Responses to vendor questions attached.

3. Attachments A and B (Excel files) have been revised and attached to unlock some protected fields in the previous attachments.

4. ***ONLINE RESPONSES FOR THIS SOLICITATION ARE PROHIBITED*** Please see Section 6 entitled BID SUBMISSION for more information.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

1. **What is the approx. budget for this project?**

It is not in the best interest of the State to release this information.

2. **Can the RFP timeline be extended by a couple of weeks?**

The bid opening has been extended to 9/16/2021 at 1:30 pm. Please read Section 6 entitled BID SUBMISSION in the CRFP documentation regarding how your technical and cost proposals must be submitted to the Purchasing Division by the bid opening date and time.

3. **What is the expected time by which the Asset Management Software project should go-live?**

For internal planning purposes, WVDOT has been anticipating an implementation of the new Fleet Management System of approximately 12 months in duration. However, the Vendor should propose the timeline that, based on its experience, seems appropriate for an organization of the size and complexity of WVDOT with the the scope of services identified and provide its rationale for its proposed timeline.

4. **Are you looking for Cloud hosting or On premise for other areas of implementation? What is your preference?**

WVDOT is open to either an on-premise solution or a Cloud-hosted solution for the new Fleet Management System. The Vendor should propose the solution which it believes provides the best overall value to the State.

5. **Do you currently use any asset management system?**

The current WVDOT Equipment Management system is an in-house solution. WVDOT does utilize Deighton dTIMS for pavement management and bridge management and is in the process of expanding its use of dTIMS to support additional transportation infrastructure assets and to support highway maintenance management. Please refer to Section 4.2 for a brief discussion of various systems initiatives in progress at WVDOT.

6. **Do you currently store parts/SKU's in your current system for all your warehouses and track inventory for these parts?**

Yes, WVDOT currently stores parts/SKUs in its legacy inventory management system. Consumable inventory is in the process of being migrated to the statewide wvOASIS Enterprise Resource Planning (ERP) system. wvOASIS will be the system of record for consumable inventory. The new Fleet Management system shall be designed to integrate with the consumable inventory functionality in wvOASIS.

7. **BOM's - Hierarchical parts? Do you have BOM's? If yes, how many BOM's would be there and approx. number of parts in each BOM?**

Bill of materials is not currently utilized for equipment repairs.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

8. Which system is used for placing PO's for third party service and parts or consumables? Which system is used for Inventory and warehouse management?

The statewide wvOASIS ERP system is the system of record for purchasing including the issuance of purchase orders. wvOASIS is based on the CGI Advantage ERP solution. As noted in Question #6, inventory and warehouse management is being migrated from a WVDOT legacy system to wvOASIS.

9. Who will train the business users? Would city be responsible for training all users on the Asset Management Software solution or Train the Trainer approach will be used?

WVDOT is expecting to utilize a train-the-trainer approach. Please refer to Section 4.2.2.20.3.

10. Do parts or equipment's have RFID or Barcode?

Neither parts or equipment currently utilize RFID or barcodes; however, WVDOT would like to utilize these capabilities in the future.

11. What is the list of interfaces that need to be developed for this RFP?

Please refer to Section 4.2.2.3.5 for a list of interfaces and to Section 4.2.2.13 for additional information on the Vendor's responsibilities for interfaces.

12. Is there historical data migration required for the project? If yes, do you have volume of the total historical data to be migrated?

Please refer to Section 4.2.2.17 for information on Data Conversion requirements. In general, it is anticipated that all existing assets with supporting attributes to include at least the current meter reading, data fields used to describe and classify the asset, age, last preventive maintenance performed and when completed, next PM in the cycle and planned date, current SGR/condition value, system wide parts master list (including designation of warrantable and rebuildable) with cross-reference to vendor specific parts with preferred vendor, and vendor lists, will be converted, along with the open and historical work orders/repair orders for these assets. The historic work order will include all repair work order detail with a focus on the maintenance activity, accomplishment and labor, equipment, material, and direct costs and as much of the assigned staff, parts and equipment as is reasonable and agreed to by WVDOT to eliminate creating resource data that only aligns with the historic work orders. The result of the data conversion process must enable WVDOT to run reports that span historic and native work order history to show cost summation (total and separated by labor, equipment, material and direct) by work activity with accomplishments using user defined date ranges. In addition, the Vendor shall convert all other data from the existing Equipment system necessary to make the new system operational to support WVDOT business processes. Please refer to Section 4.1, Exhibit 1 for information on existing WVDOH equipment assets. An estimate of the volume of repair orders/work orders to be converted is not currently available.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

13. Which HR system is used for employee information? What information is stored about the employee in the HR system e.g., worker certifications?

The wvOASIS ERP Human Capital Management (HCM) subsystem is the system of record for human resource information. The new Fleet Management System shall integrate with wvOASIS as required to obtain necessary employee information. Worker certifications are not currently stored in wvOASIS.

14. Which systems are used for City Time keeping? Do these system track time spent by technicians or maintenance crews on the job/Work order?

WVDOT employees currently track their time in a legacy WVDOT system. Beginning in October 2021, WVDOT employees will begin entering their time into a module of the wvOASIS ERP system. For purposes of the implementation of the new Fleet Management System, Vendors shall assume that WVDOT employees will enter their time through wvOASIS and will charge time to work orders/repair orders (known as a task order in wvOASIS). Integration with wvOASIS will be required to set-up work orders for time charging in wvOASIS and to receive hours worked and labor cost backed from wvOASIS. These interfaces are identified in Section 4.2.2.3.5.

15. How many overall users are there going to be for the Asset Management system?

Please refer to Section 4.1.

16. How many users will be using the Mobile app?

Vendors shall assume that all users could utilize the mobile application.

17. Which mobile devices and browsers would in scope if mobile app is in scope? Would both iOS and Android devices be used?

The Vendor shall clearly specify in its proposal any technology constraints in terms of use of its mobile application. WVDOT prefers that a Vendor's mobile application operate on both iOS and Android devices.

18. Do you plan to use IoT technology for Asset Management Software? If yes, do you have any IoT platform today? What is that?

There are currently no specific plans to integrate the new Fleet Management System with IOT devices as part of the initial implementation. Vendors should describe the capabilities of its proposed solution to integrate with IoT devices as a potential future opportunity which WVDOT could take advantage of.

19. Are there any plans of integrating IoT for any or some of the Assets?

Please refer to Question #18.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

20. Please confirm if online submissions via the state OASIS system are acceptable or if only hardcopy submissions are allowed? If a hardcopy is required, this would mean shipping no later than 1 September to make the 3 September deadline, therefore would an extension of deadline be permissible?

The response must be prepared in hardcopy and either mailed or delivered to the Purchasing Division. Soft copies of the completed requirements matrix and the cost proposal template shall be included with the Vendor's response as specified in the RFP. The bid opening has been extended to 09/16/2021 at 1:30 pm.

Refer to Section 6 entitled BID SUBMISSION for more information about proposal submission.

21. If awarded contract, please confirm if a milestone payment agreement in lieu of performance bond is acceptable?

The State expects the selected Vendor to provide a performance bond as described in the RFP.

22. In terms of legacy data conversion, would the State consider a summary of history by asset or does it want full transactional history and if so, how many years back?

Please refer to the answer to Question #12.

23. What is the number of repair facilities located across the state?

There are approximately 90 repair facilities statewide.

24. What is the number of parts inventories located across the state?

Each repair facility could also have parts inventory, so again, there are approximately 90 locations where parts could be stored.

25. What commercial fuel cards (not Fuel Master) are used and is an interface to those required?

No interface with commercial fuel cards is anticipated.

26. Please define all historical data transactions (not data records such as tasks, parts, assets, etc.) that is expected to be converted?

Please refer to the answer to Question #12.

27. Define in more detail expectations for the change management deliverables.

Other than training planning, design and delivery, there are no formal organizational change management deliverables per se within the Vendor's scope of services. However, the Vendor is expected to facilitate business process re-engineering sessions by demonstrating for WVDOT opportunities for the agency to streamline its business processes to optimize use of the Vendor's fleet management software. In addition, WVDOT expects the vendor to implement sound change management techniques and methods across the software lifecycle with a

desired outcome to ensure a successful and sustainable transition of ownership to WVDOT, see section 4.2.2.20.7, Knowledge Transfer:

Finally, please refer to Section 4.2.2.20 for training responsibilities.

28. **Integrations - Please define all required integrations for your organization. Please outline the system, direction (one-way or bi-directional), business case, data elements to be passed and general workflow for each integration (ex: Asset Updates, Purchasing, Receipts, Billing, Employee/Operators/User, Fuel, etc.) and any other systems not noted in this question. Specifically, interfaces that are noted as two-way, describe the data being sent and received and which system is doing it. A few specific integrations questions are noted further:**

Please refer to Section 4.2.2.3.5 which provides a list of interfaces identified to date and Section 4.2.2.13 which provides information on the Vendor's responsibilities for interfaces. This is the information on interfaces which is available at this time and should be used by Vendors as the basis for constructing their proposals.

i) **Integrations - please define the system of record for both work orders (labor, tasks, etc.) and inventory (part numbers, quantity on hand and price) as relates to the interfaces. Our fleet solution is typically the system of record (parts, equipment and work orders with labor and tasks) but can interface with other systems to pass its data to them however knowing the expected system of record helps to define the scope further and is critical to the proposed workflow.**

   The new Fleet Management System will be the system of record for work management. wvOASIS will be the system of record for inventory management. The new Fleet Management System will integrate with the inventory module in wvOASIS.

ii) **Integrations - wvOASIS Advantage Financials and Human Resource Management - are employees logging time on work orders and repair tasks in this system or is the final time logged in the new FMIS to be transferred over with the detail of work order, tasks, etc. to do payroll?**

   Please refer to the answer to Question #14

iii) **Integrations - Fuel - discussed as two-way for accepting fuel usage from Fuel Master but contained an "and" and then nothing, appears to be a typo. What is the other direction for and to?**

   In the writing style used for this section of the RFP, the "and" is used stylistically at the end of the next to last bullet in a bulleted list. This is not a typo. The integration with Fuel Master is expected to be two-way. The Fleet Management System

provides Fuel Master with active assets (updates of asset records go to Fuel Master when assets are onboarded or retired) and Fuel Master provides fuel consumption and the odometer reading at time of fueling to the Fleet Management System.

iv) **Integrations - DOA Fleet leased passenger equipment - describe the direction to and from and what data is being passed each direction including which is the system of record for the data elements.**

The DOA Fleet Management System will be the system of record for any vehicles leased by WVDOT from DOA. The DOA Fleet Management System will provide asset inventory information at time of leasing, any work history for work performed on a vehicle by DOA and update the status of the vehicle (active/lease ended, etc.) to the WVDOT Fleet Management System. The WVDOT Fleet Management System will provide updates to the DOA Fleet Management System for fuel consumption history and for any work performed on the vehicles by WVDOT technicians.

29. **In section 4.2.2.22 Production Maintenance and Support, State of WV DOT requires an onsite presence and notes that onsite requirement to be "essential". While we provide an onshore single point of contact through our Service Delivery Manager, our ongoing support is typically remote, leveraging a vast pool of experienced resources. Would West Virginia DOT be open to a proposal that includes cost effective remote support by our extensive team, or is the requirement to have a dedicated onsite presence a fixed requirement?**

WVDOT requires full on-site post implementation maintenance and support for six (6) months after Go-Live. The Vendor has some flexibility in how this requirement is met. For example, a Vendor could have one or two dedicated on-site resources who were part of the project team and familiar with WVDOT operations acting as the primary points of contact and leveraging product support staff who are remote at various locations.

30. **What vendors has the State seen EAM product demos from?**

During the time WVDOT was planning for a new Fleet Management System, various WVDOT staff have seen demos of several different EAM products. However, it is not possible to develop a comprehensive list of all products that were demonstrated.

31. **Is a consultant engaged in the solicitation process, if so, who? What will their role be during the RFP evaluation and implementation?**

Mott MacDonald has been engaged by WVDOT to provide program management, subject matter expertise and business analysis support for WVDOT's ERP initiatives. Mott MacDonald and one of its subconsultants, eVision Partners, assisted the State with the development of the RFP and will be acting as advisors to the Selection Committee during the evaluation process. During implementation, the Mott MacDonald team will be providing program management and subject matter expertise support to WVDOT as requested by the agency.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

32. Regarding *Req. # FLT-212 Generate reservation with a PIN# for key control purposes.* Please clarify the existing key control solution to be integrated with the proposed solution and/or the expected functionality in the proposed solution to address key control capabilities.

There is not currently a key control solution implemented. WVDOT wants to have the capability to implement such a solution in the future. Thus, FLT-212 represents a capability WVDOT would like to have in a new Fleet Management System but not capability which it expects to initially implement.

33. Please clarify the total number of users and their expected roles in the proposed solution.

Please refer to the answer to Question #15.

34. How many users will be accessing the solution from a mobile device?

Please refer to the answer to Question #16.

35. Can the proposal submission deadline be extended two weeks?

The bid opening has been extended to 9/16/2021 at 1:30 pm. Please refer to Section 6 entitled BID SUBMISSION for information regarding your bid submission.

36. In the RFP document ("CRFP DOT2200000001_Solicitation Documents Part 1 of 4.pdf"), Section 4: Project Specifications (pages 27-68) lists out many requirements and deliverables, however this section is not included in the Technical Proposal Content structure (page 70-80). Does the State of WV need us to respond to this Project Specifications section in the proposal? If so, please advise where we should include this information in the Technical Proposal, with any specifications on the name of the section/tab if there is any preference.

Please read the CRFP in its entirety as there are several sections within the documents explaining the technical and cost proposals. Please see Section 5 entitled "Vendor Proposal" subsection 5.4.3.

37. Pages 7 Number 6. Bid Submission: states that "All bids must be submitted electronically through wvOASIS or signed and delivered", but at the end of that section also states: " Submission of a response to a Request for Proposal is not permitted in wvOASIS." We would prefer to submit via portal, but just want to clarify if based on the RFP instructions, that's even an option.

RFP technical and cost proposals cannot be submitted online through wvOASIS. Please read Section 6 Bid Submission in the "Instructions to Vendors Submitted Bids" in its entirety.

CRFP DOT2200000001 – Addendum No. 2
West Virginia Department of Transportation (WVDOT) Fleet Management System
Responses to Vendor Questions

38. Do we need to obtain wet original signatures for the notarizations, or could we provide copies of the original? Due to COVID-19 restrictions/WFH arrangement, obtaining wet signatures from our authorized signatory will require a bit more time and coordination.

Copies of the documents are acceptable for proposal submission.

39. The RFP only details instructions on how to package the two part submission: Technical and Cost proposal, but no mention of the legal documents. Do you have any further instructions on the submission of legal documents?

Please see Sections 21 and 31 in the CRFP documentation regarding "Your Submission is a Public Document". Please refer to Section 6 entitled BID SUBMISSION for more information.

40. Given the requirements and length of the RFP, is it possible to get an extension for asking questions and/or submission deadlines?

The bid opening has been extended to 09/16/2021 at 1:30 pm.

41. Both Excel spreadsheets:

Attachment A - Requirements Spreadsheet. There are some records in the Vendor Comments column that are locked (entire Management Reporting tab, FLT-229 through FLT-236 of Fleet Management tab, etc.)

Attachment B - Cost Proposal. All tabs are protected except the Cost Summary.

The Excel spreadsheets, Attachments A and B, have been corrected and revised versions provided.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP DOT2200000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[ ]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

_____
Company

_____
Authorized Signature

_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002	**Reason for Modification:**
Doc Description: FLEET MANAGEMENT SYSTEM - 7021EC12	Addendum No. 1 - to extend the question period deadline and extend the bid opening.
Proc Type: Central Master Agreement	

Date Issued	Solicitation Closes	Solicitation No	Version
2021-08-17	2021-09-09 13:30	CRFP 0803 DOT2200000001	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM NO. 1

1. To extend the question deadline period to 08/20/2021 by 4:00 pm. Please see attached pages.

2. To extend the bid opening from 09/02/2021 to 09/09/2021 at 1:30 pm.

ONLINE RESPONSES FOR THIS SOLICITATION ARE PROHIBITED

No other changes.

INVOICE TO	SHIP TO
DIVISION OF HIGHWAYS OFFICE OF THE SECRETARY 1900 KANAWHA BLVD E, BLDG 5 RM A109 CHARLESTON WV 25305-0440 US	DIVISION OF HIGHWAYS EXECUTIVE DIVISION 1900 KANAWHA BLVD E, BLDG 5 CHARLESTON WV 25305-0430 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	DEVELOPMENT IMPLEMENTATION SUPPORT FLEET MGT SYSTEM				

Comm Code	Manufacturer	Specification	Model #
43233701			

Extended Description:
SOFTWARE DEVELOPMENT, INSTALLATION, SUPPORT AND TRAINING

SEE ATTACHMENTS.

SCHEDULE OF EVENTS

Line	Event	Event Date

SOLICITATION NUMBER: CRFP DOT2200000001
Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as CRFP DOT2200000001 ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[X] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[X] Other

Description of Modification to Solicitation:

1. To extend the question deadline to 08/20/2021 by 4:00 pm. Please refer to Item No. 4 in the Instructions to Vendors Submitting Bids portion of the CRFP documentation. See below.

   4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

   Submitted e-mails should have solicitation number in the subject line.
   Question Submission Deadline: 08/20/2021 by 4:00 pm
   Submit Questions to: Tara Lyle, Buyer Supervisor
   2019 Washington Street, East
   Charleston, WV 25305
   Email: Tara.L.Lyle@wv.gov

2. The bid opening has moved from 09/02/2021 to 09/09/2021. The bid opening time remains at 1:30 pm.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP DOT2200000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[ ]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

_____
Company

_____
Authorized Signature

_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

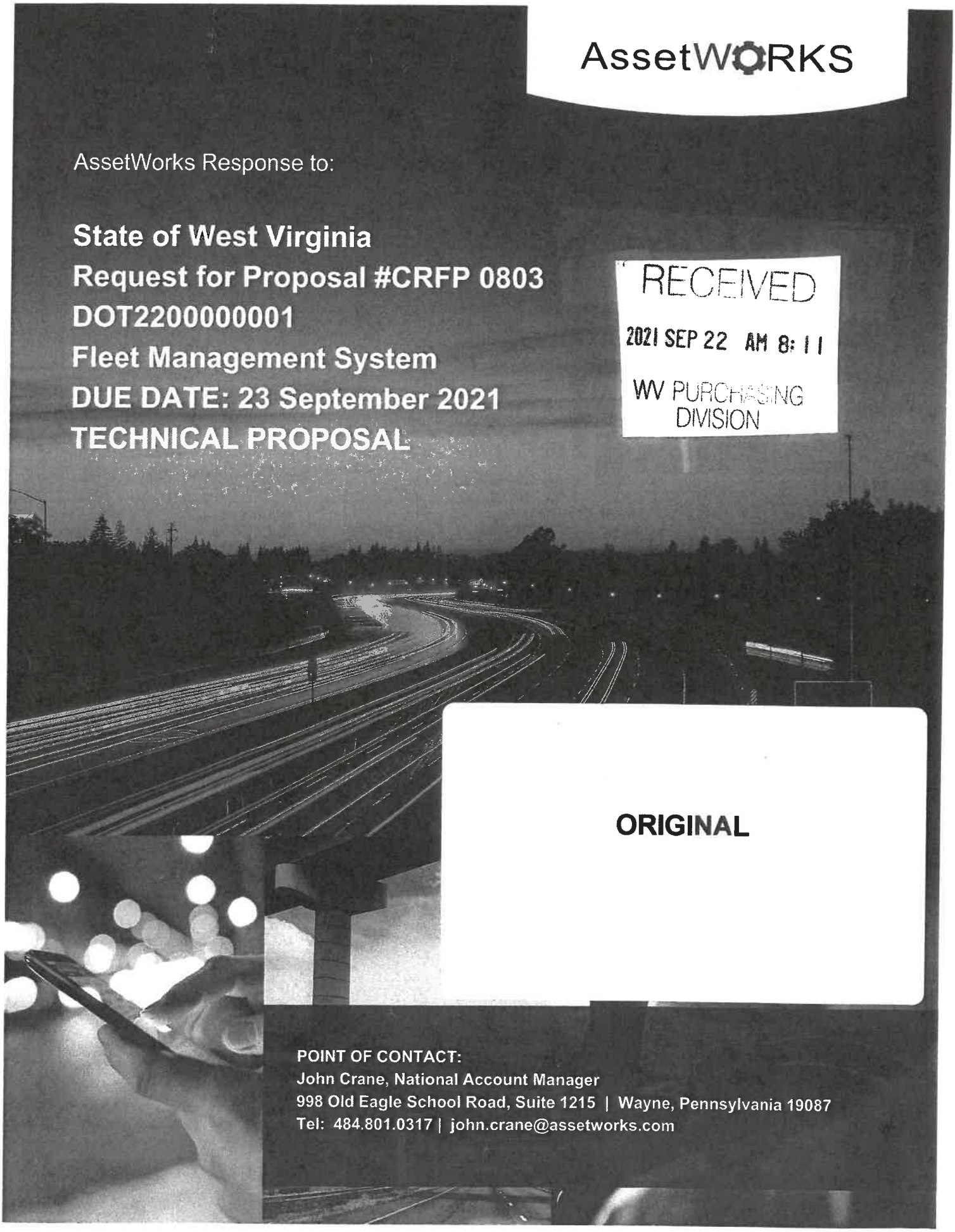
Exhibit D

AssetWORKS

AssetWorks Response to:

State of West Virginia
Request for Proposal #CRFP 0803
DOT2200000001
Fleet Management System
DUE DATE: 23 September 2021
TECHNICAL PROPOSAL

RECEIVED
2021 SEP 22 AM 8:11
WV PURCHASING DIVISION



ORIGINAL

POINT OF CONTACT:
John Crane, National Account Manager
998 Old Eagle School Road, Suite 1215 | Wayne, Pennsylvania 19087
Tel: 484.801.0317 | john.crane@assetworks.com

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002			**Reason for Modification:**
Doc Description: Addendum No 2 - FLEET MANAGEMENT SYSTEM			Addendum No. 2
Proc Type: Central Master Agreement			
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-09-03	2021-09-16 13:30	CRFP 0803 DOT2200000001	3

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name : AssetWorks LLC

Address : Headquarters

Street : 998 Old Eagle School Rd #1215

City : Wayne

State : PA **Country :** USA **Zip :** 19087

Principal Contact : John Crane, National Sales Executive

Vendor Contact Phone: 484-801-0317/ Email: john.crane@assetworks.com **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X **FEIN#** 98-0358175 **DATE** 09 Sep 2021

All offers subject to all terms and conditions contained in this solicitation

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Service - Prof

Proc Folder: 887002 **Doc Description:** Addendum No 3 - FLEET MANAGEMENT SYSTEM **Proc Type:** Central Master Agreement			**Reason for Modification:** Addendum No. 3 - to provide responses to timely submitted questions and move the bid opening to 09/23/2021.
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-09-13	2021-09-23 13:30	CRFP 0803 DOT2200000001	4

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:
Vendor Name : AssetWorks LLC
Address : 998 Old Eagle School Rd #1215
Street :
City : Wayne
State : PA **Country :** USA **Zip :** 19087
Principal Contact : John Crane, National Sales Executive
Vendor Contact Phone: 813 478-1125 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X [signature] **FEIN#** 98-0358175 **DATE** 15 Sep 2021

All offers subject to all terms and conditions contained in this solicitation

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP DOT2200000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	Addendum No. 1	[ ]	Addendum No. 6
[X]	Addendum No. 2	[ ]	Addendum No. 7
[X]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

AssetWorks LLC
Company

Authorized Signature

15 Sep 2021
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

LETTER OF TRANSMITTAL

23 September 2021

Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130
Attn: Tara L. Lyle

RE: Request for Proposal CRFP 0803 DOT2200000001
Fleet Management System

Dear Ms. Lyle,

AssetWorks LLC has carefully reviewed that above mentioned proposal for a Fleet Management System and is confident our state-of-the-art AssetWorks EAM solution will meet or exceed those goals.

AssetWorks LLC is the sole source provider of its enterprise asset maintenance management solution; EAM, being proposed to the State. AssetWorks will work as the primary contractor for this engagement and does not anticipate the use of any subcontractors and can further confirm our employees will follow all relevant WVDOT policies, procedures and standards. Additionally, AssetWorks has no interest, direct or indirect, which would conflict with the performance of services under this contract and shall not employ, in the performance of this contract, any person with a conflict.

The WVDOT contact for this proposal is John Crane who is authorized to make representations on behalf of the corporation:

John Crane, National Sales Executive
AssetWorks LLC
998 Old Eagle School Rd #1215
Wayne, PA 19087
Tel: 484-801-0317/Email: john.crane@assetworks.com

I, Robert Hallett, as General Manager of AssetWorks LLC am authorized to bind the corporation into contracts and can confirm the pricing attached to this proposal is valid for 180 days from 23 September 2021.

Robert Hallett
General Manager
AssetWorks LLC

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

AssetWORKS

TABLE OF CONTENTS

Letter of Transmittal 1

TAB 1-EXECUTIVE SUMMARY 5

TAB 2 - Vendor Company Profile 9

TAB 3 - Subcontractor Company Profiles 9

TAB 4 - Licensed Product Information 10

Business Applications 10

What is FleetFocus? 11

Barcode Functionality 11

ASSET MANAGEMENT 11

Components 12

Stationary Assets 12

Preventative Maintenance Schedules 12

Notifications 13

SERVICE REQUEST MANAGEMENT 13

Unlimited Service Request Web Portals 14

Service Writers 14

Mobile 14

WORK ORDER MANAGEMENT 14

Work Order Tracking 14

Commercial Work 15

Billing 15

Historical Costs 16

Shop Calendar 16

Recalls/CAMPAIGNS 17

Warranty Tracking 17

Accident Tracking 17

TECHNICIAN WORK MANAGEMENT 18

My Work Orders 18

Work Order Completion 18

TimeCard 19

INVENTORY MANAGEMENT 20

Part Records 20

Requests 21

Issues 21

Replenishment 21

Inventory Counts 21

Cores 22

Mobile Applications 22

Fleet Connect 23

Edge 23

REPORTING & ANALYTICS 24

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Standard Reports 24
Ad-Hoc Reports 24
Dashboard Key Performance Indicators (KPIs) 24
Performance & Replacement Analysis 25
Fuel & Fluid Management *25*
Optional Fuel & Fluid Modules 25
FuelFocus: Fuel Management System 25
FuelFocus: EV (Electric Vehicles) 26
TRIPCard: Commercial Fuel & Maintenance Transactions 26
FluidFocus 26
3rd Party Integrations 26
INTEGRATIONS *26*
Standard Integrations 27
FLEETFOCUS: OPTIONAL MODULES *27*
Customer Access 27
Motor Pool 27
Motor Pool Reservations (Web) 27
Motor Pool Reservations (Mobile) 27
KeyValet 28
Allocation & Assignment 28
Inventory Catalog 28
Telematics/GPS 29
Capital Asset Management (CAM) 29
ADMINISTRATION & PERMISSIONS *30*
Admin Functions 30
Data Loader 30
User Permissions 30
4.3.10.2 Technology Products *31*
4.3.10.2.1 Ad Hoc Reporting Tools *34*
4.3.10.2.2 Business Intelligence Tools *35*
4.3.10.2.3. Product Maintenance *36*
4.3.10.2.4. Future Direction *37*
TAB 5 - References **39**
TAB 6 - Proposed Project Staff and Organization **40**
4.3.12.1. Project Overview *40*
4.3.12.2. Personnel Summary Table *42*
TAB 7- Vendor's Proposed Plan for Providing Services **43**
TAB 8 - Responses to State's Goals and Objectives **48**
HOSTING **54**
TECHNICAL SUPPORT & MAINTENANCE: **56**
Tab 9: Capabilities of Proposed VPS Solution **60**

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Tab 10: Sample Statement of Work (SOW)....63

Tab 11: Requirements Matrix Responses....64

EXCEPTIONS:....65

RequireD Forms....67

APPENDIX:....68

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 1-EXECUTIVE SUMMARY

AssetWorks understands that WVDOT is seeking a Fleet and Equipment Management System solution to support the needs of the WVDOT Division of Highways (WVDOH) and the State Rail Authority (SRA). WVDOH is the state agency responsible for managing the state highway system for the State of West Virginia. WVDOH is responsible for planning, engineering, right-of-way acquisition, construction, reconstruction, traffic regulation and maintenance of more than 35,000 miles of state roads. Additional duties include highway research, outdoor advertising contiguous to state roads, roadside development, safety and weight enforcement and dissemination of highway information. WVDOH is managed through divisions based in the central office in Charleston, West Virginia and 10 District offices located across the state. WVDOH owns, operates and maintains their own vehicles along with highway construction and maintenance equipment. The WVDOH Equipment Division is located in Buckhannon, WV, with additional garage and repair facilities located across the State in each of WVDOH's ten (10) districts. WVDOT estimates 100 users for the Fleet and Equipment Management system located across the state. WVDOT also estimates there will be approximately 10 SRA users of the new system.

Legacy Solution:
AssetWorks has noted that the current WVDOT Equipment Management System is a custom developed mainframe-based legacy application. Along with WVDOT's other legacy administrative systems, these applications have been designed to be tightly integrated to support WVDOT operations, where they interface with the wvOASIS ERP system to support accounts payable processing and the transfer of summary-level financial information to wvOASIS. The WVDOT timekeeping application also interfaces to wvOASIS for payroll processing at the detail level.

The existing WVDOT administrative systems are approximately 35 years old. These systems are primarily written in the CICS/COBOL (Customer Information Control System / Common Business Oriented Language) Programming computer languages using VSAM (Virtual Storage Access Method) as the file structure. Some additional subsystems have also been developed utilizing SAS business analysis software. These systems primarily execute in the mainframe environment operated by the WV Office of Technology (WVOT).

To support WVDOT's fleet and equipment operations, the new Fleet and Equipment Management System, AssetWorks is proposing its state-of-the-art enterprise asset management solution; FleetFocus, to the State. FleetFocus will provide asset inventory/registry, work management, warranty management, planning and budgeting, modeling and analytics and management reporting capabilities in support of WVDOT fleet management operations. ***Additionally, AssetWorks provides integration with GeoTab and others as well as comprehensive Telematics module.***

Finally, AssetWorks understands that the State is in the midst of a multi-year effort to implement an ERP system and an extension of the existing Deighton dTIMS. It is expected that the new Fleet and Equipment Management System will integrate with wvOASIS as the fixed asset system of record for the State and to provide equipment cost information as required for cost capture for State and federal projects and to support billing for federal reimbursement which is performed in wvOASIS. Additionally, In parallel with the implementation of a new Fleet and Equipment Management system, WVDOT will be implementing the Consumable Inventory module within wvOASIS to support the agency's consumable inventory requirements. The Vendor's proposed fleet and equipment management system will be expected to integrate with the wvOASIS consumable inventory module to support materials management requirements for the WVDOH and SRA fleet management operations.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

About FleetFocus

AssetWorks LLC, with its proposed FleetFocus solution, was founded more than 40 years ago with the goal of developing a software specific to the needs of fleet maintenance management. AssetWorks is the largest provider of asset maintenance management software systems to both private and public sector fleets and is one of the few firms in the market that focuses on fleet assets first. The majority of our competitors offer a 'generalized' asset package, mostly to private manufacturing and processing customers, but then these generic work order systems are sold to fleet customers without regard to the specific needs of vehicle management. Ultimately, the lack of fleet-specific functionality in these generic solutions catches up with the users and the value of a targeted, fleet-centric solution wins out. The proposed FleetFocus solution proves itself time and time again as the system of record for all things municipal, utility and public fleet. This claim is evidenced by the size and diversity of the AssetWorks customer base which includes many of North America's largest fleets:

- AssetWorks provides fleet systems to 21 of the 50 State DOTs, including: Virginia, New York, New Jersey, Pennsylvania, Maine, New Hampshire, Vermont and Delaware, as well as California, Arizona, Oregon, Washington, Indiana, and Illinois.
- Over 225 city & county customers throughout North America, including eight of the ten largest US cities such as Sacramento, San Francisco, Houston, Los Angeles, Chicago, Dallas, Atlanta, Philadelphia, Detroit, Spokane, and St. Louis.
- Six of the top ten major North American private and commercial fleets, including Waste Management, Greyhound Lines, Schneider National, and Conway Transportation
- Seven of the ten largest utilities in the U.S. including Exelon, Southern Companies, First Energy, SEMPRA, and Dominion Resources.
- Leading corporations with large fleet assets such as XPO Logistics, Royal Mail and Pepsi Beverages Company
- Many federal government fleet clients including the United State Marine Corps (USMC), the US Naval Special Warfare Group, the Department of Homeland Security/Border Patrol Fleet, and others.
- Airline Ground Services Fleets (American Airlines, Delta, Air Canada, and United Airlines, Airco)

About AssetWorks

Originally founded in 1979 as Control Software Inc., our MCMS solution was launched as a mainframe application to serve the commercial trucking industry. Now, 40 years later, our solutions have evolved into the fully web-based, zero client architecture, FleetFocus, being offered today. The preferred fleet system of medium to large US cities, counties and States, FleetFocus capably manages the complexities and business process of public sector organizations.

Our FleetFocus solution has been ***implemented successfully over 500 times without a single failure*** including at many large public sector organizations with geographically diverse locations and mixed fleet assets. The WVDOT can be assured that AssetWorks has the experience, knowledge, professionalism and depth of resources required to make this project a success. AssetWorks understands that the real work happens after implementation and a software system is only as good as the end user. We also recognize the potential challenges the WVDOT may face in moving from its legacy system to a modern FMIS. But the WVDOT can be assured we know how to successfully transition and train your users, according to role and responsibility, and have done this successfully many times. Headquartered in Wayne, PA since 1985, AssetWorks employs 285 persons to develop, implement, administer and support its suite of applications.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

FleetFocus' capabilities provide real management input and analysis, which in turn, helps operations meet their long- and short-term productivity and financial goals. FleetFocus provides fleet managers the functionality they need to streamline their workflow processes, including:

- Improved effectiveness of equipment replacement programs based on analysis of cost and performance data
- Ability to track and maintain linear, point-to-point, boundary and space assets and full GIS integration available.
- Custom integration between FleetFocus and your ERP system, as well as interfaces from a wide variety of third-party vendors
- Improved fleet size and configuration through accurate information collection on equipment usage and demand for availability
- Efficiency improvement through vendor management for commercial repairs
- Improved communication between customers with built-in notifications
- Equipment cost reductions through improved warranty tracking for equipment, major components, and parts
- Equipment cost reductions through more effective preventive maintenance
- Increased labor productivity through analysis of mechanics' time expended in shops
- Equipment cost reductions through identification of excessive cost and consumption
- Inventory cost reductions through better stocking and purchasing decisions, including parts obsolescence

AssetWorks FleetFocus Can Help Organizations Answer:

- Why is equipment out of service?
- How well are outside vendors performing?
- How productive is the maintenance workforce?
- What portion of our work is proactive vs. reactive (scheduled vs. unscheduled)?
- How often do we do repeat work?
- What work qualifies for warranty?
- Are we recovering money from claims submitted?
- Is the inventory investment optimal?
- Which assets or vehicles are running at excessive costs and why?
- What assets or vehicles need to be replaced?
- What is the total cost of ownership of our assets?

FleetFocus is a fully scalable, web-based application that is easy to deploy and economical to maintain. All application maintenance and upgrades are applied one time to the application server, reducing the time and cost needed to deploy the application. The system is capable of tracking ***an unlimited number of equipment units and supporting an unlimited number of workstations*** from any number of locations.

Financially Solid

As a standalone subsidiary of a publicly traded corporation, Constellation Software Inc., AssetWorks offers a transparency and rock-solid assurance unmatched by other vendors. AssetWorks LLC is headquartered in Wayne, PA, with regional offices in San Antonio, TX; La Jolla, CA; and Spokane Valley, WA.

AssetWorks LLC (Headquarters)
998 Old Eagle School Rd, Suite 1215
Wayne, PA 19087
Tel: 610-687-9202/ Fax: 610-971-9447
www.assetworks.com

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Optional Data Center

As a further service to our customers, AssetWorks offers the option of a secure, hosted environment for FleetFocus customers. The AssetWorks Data Center, and specifically the controls exhibited and enforced on the ASP (Application Service Provider) environment, has been granted the designation "Authorized to Operate" (ATO) as a system housing CUI (Controlled Unclassified Information) data at our facility based on the DOJ assessment using NIST 800-53 guidelines for FISMA (Federal Information Standards Management Agency) standards (SP 800-171 inclusive). This independent audit and subsequent designation was conducted by the Department of Justice (DOJ) at the request of the Department of Homeland Security (DHS), a current AssetWorks ASP customer.

By selecting the AssetWorks FleetFocus solution, the WVDOT can be assured of a functionally rich, technologically stable application which can expand and grow with the WVDOT's changing needs.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 2 - VENDOR COMPANY PROFILE

AssetWorks LLC was founded over 40 years ago with the specific mission of fleet maintenance management and has expanded that vision beyond vehicles, equipment and fixed assets to include all assets including linear, boundary and point-to-point. Our proposed FleetFocus solution is built on proven technology and is fully web-based with an open architecture allowing for ease of integration.

AssetWorks FleetFocus is in use at 28 of the 50 states including some of the nation's largest DOTs such as VADOT, TXDOT, NYDOT and NJDOT. AssetWorks understands the needs of complex, geographically dispersed public service organizations and has consistently been selected as the solution of choice to most transportation departments in the U.S.

AssetWorks is a standalone subsidiary of Trapeze Software Group Inc with the ultimate parent of Constellation Software Inc., a publicly traded corporation on the Toronto stock exchange with revenues in excess of $2,3B for FY2020. ***This relationship offers WVDOT the assurance of rock-solid financial backing and a depth of resources unmatched in the industry***. Headquartered in Wayne, PA for the past 35 years, AssetWorks maintains regional offices in San Antonio, TX, Calgary, AB and Spokane Valley, WA.

AssetWorks LLC (Headquarters)
998 Old Eagle School Rd #1215
Wayne, PA 19087

16201 E Indiana Ave, (Serving Office)
Spokane Valley, WA 99216

AssetWorks LLC does not know of any conflict of interest with its corporation, nor parent entities, and the State of West Virginia. Further, AssetWorks can confirm that the Vendor and any officers in its individual or professional capacity or associated with another company have never filed (nor had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors. Additionally, AssetWorks LLC and its ultimate parent, Constellation Software Inc, have never been subject to nor have any pending Securities Exchange Commission investigations involving the Vendor.

AssetWorks can confirm there is no open or pending litigation initiated by Vendor or where Vendor is a defendant in a customer matter; and can confirm we have not had a contract terminated for cause or convenience in the past five (5) years.

Finally, AssetWorks has no criminal or civil offenses to disclose

TAB 3 - SUBCONTRACTOR COMPANY PROFILES

AssetWorks does not anticipate using the services of any subcontractors for the proposed project and maintains all professional service personnel as regular employees.

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

TAB 4 - LICENSED PRODUCT INFORMATION

BUSINESS APPLICATIONS

Each Software Provider (please list the primary Fleet and Equipment Management Software Provider first);
- **The different product sets to be provided by each Software Provider;**
- **The modules/functions within those product sets;**
- **The release level of the products to be used;**
- **The next release/version level to be released; and**
- **The planned release date of the next release/version.**

AssetWorks is the sole source provider of its FleetFocus Enterprise Asset Maintenance Management Solution:
FleetFocus v21.0.3
Next version release: April 2022
Patch releases as needed

See full descriptions below:

Asset Management Portal
Work and Inventory Management Module
Capital Planning Module
Asset Performance Assessment Tool
Fuel Integration
MobileFocus Enterprise Suite
Service Requests Portal
Notifications Module
Customer Access Module
MAXQueue Integration Engine
KPI/Dashboards
Ad-Hoc Query Tool
Reporting Module powered by Crystal Reports

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

WHAT IS FLEETFOCUS?

FleetFocus is a web-based fleet and equipment management solution capable of tracking *unlimited assets, users, and locations*. FleetFocus manages a wide variety of functions, including (but not limited to):

- Asset management
- Service request management
- Work order management
- Technician work management
- Inventory management
- Mobile applications
- Reporting & analytics
- Fuel and fluid management

BARCODE FUNCTIONALITY

FleetFocus is fully barcode enabled, allowing users to populate any field. This includes bar coding for assets, parts, and work orders while also providing the ability to print bar codes as required. Users can scan bar codes using the mobile device's camera via our mobile applications.

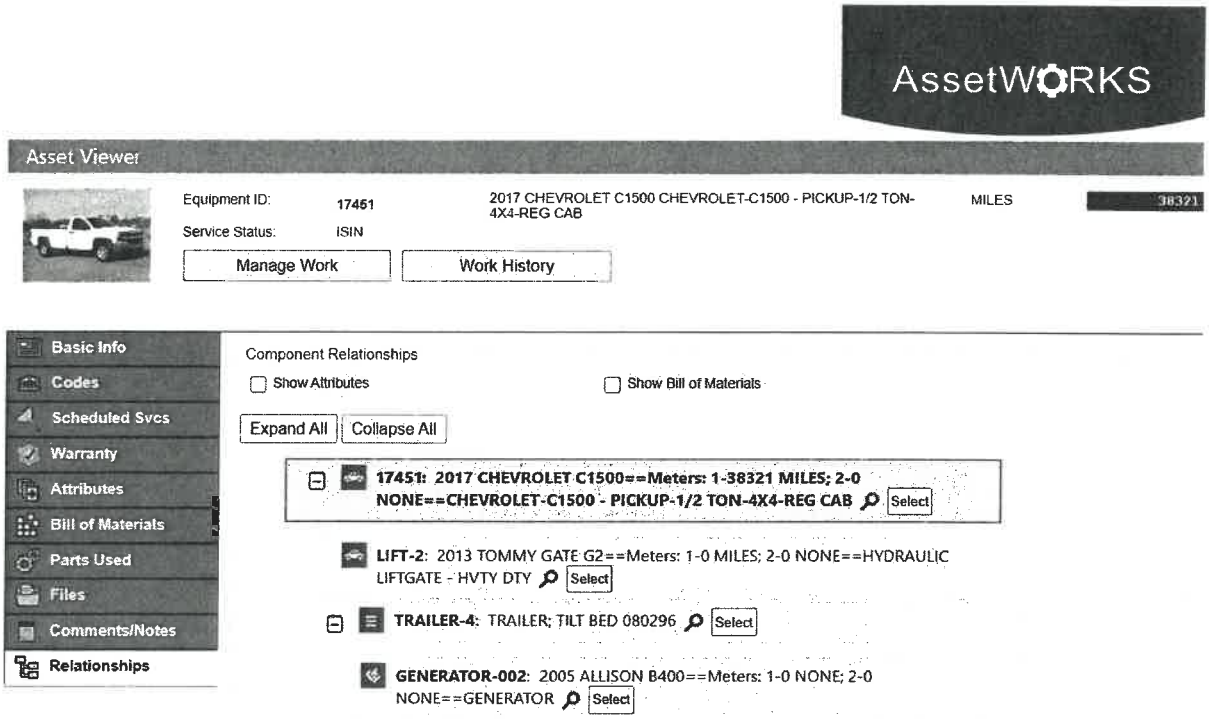
ASSET MANAGEMENT

Asset Management is the core of the FleetFocus application as it tracks unlimited assets of any type including vehicles, equipment, and fixed assets. The application tracks all asset information through our extensive offering of out-of-the-box fields. Any fields or attributes not available out-of-the-box can be created and tracked for any asset. All data is reportable and readily accessible for display, printing, and updating. The application also supports tracking of specification data and subsystems such as body, engine, transmission, etc.

FleetFocus tracks each asset throughout its entire lifecycle, from acquisition to disposal. This information includes (but is not limited to):

- Basic asset data (*e.g.*, year/ make/model /VIN/etc.)
- Meter Info
- Preventative maintenance
- Classifications
- Driver/operator assignment & related info
- Motor pool
- Recurring costs
- Acquisition
- Registration
- Ownership
- Service level agreement (SLA)
- Warranty
- File attachments
- Asset/component relationships
- Replacement

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com



COMPONENTS

Components may be tracked and maintained like any other asset. This typically includes assets without license and registration such as generators, lawn equipment, radios/electronics, etc. Components may have their own preventive maintenance schedule or through parent/child relationship roll up to the parent asset's preventive maintenance schedule.

STATIONARY ASSETS

Fixed assets may be tracked and maintained, which can include (but is not limited to): facilities and fixed assets within the facility, or facility campus. These assets have their own preventive maintenance schedules, or through parent/child relationships, roll up to the parent asset's preventive maintenance schedule. Relationship hierarchies can be created in any complexity for all assets.

PREVENTATIVE MAINTENANCE SCHEDULES

Preventive Maintenance (PM) schedules are tracked for all assets of any type. Each PM schedule can contain as many services and inspections as required for the full lifecycle of the asset. Each service and inspection may have associated checklists, procedures, and attached documentation.

Services and inspections may be triggered on up to four criteria:

- 2 Meters
  - Miles/Kilometers
  - Hours
- Fuel consumption
- Time (days, weeks, months, etc.)

Each criterion can be set with leads times that drive additional functionality.

- *Notifications* to drivers and/or department coordinators via text message and/or email
- *Appointment calendar* links within the notification for scheduling the service/inspection
- *Automatic request* of parts/parts kits through the fully integrated inventory management

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Example: a service that is due every 6 months or 7,000 miles can be set with lead times such as 15 days before the 6-month mark or 400 miles before the 7,000 mile mark. Whatever triggers first can initiate any of the above listed lead time functionality.

Any PM schedule can be set with a pre-defined calendar to accommodate seasonal maintenance or any unique calendar scheduling.

NOTIFICATIONS

Notifications can be auto generated on any triggering event, eliminating manual administrative tasks such as phone calls, emails, and reactive data lookup. These notifications can be sent in-application, via text message, or via email. FleetFocus provides *over 80* out-of-the-box notifications and any custom notification can be created if required. Some standard out of the box notifications include:

- PM/Inspection Due
- Vehicle Ready for Pickup
- License Renewal
- Motor Pool Reservation Confirmation

SERVICE REQUEST MANAGEMENT

FleetFocus provides the ability to report issues through our service request functionality. Service requests may be assigned to new or existing work orders by permissioned users. Assigning service requests to work orders allows complete tracking of service requests from when the issue was reported through completion of the reported problem. All cost transactions, down time, and work order details are tracked to the service request.

Service requests can be easily reported by completing a basic 3 step process:

1) *Who are you?*
Ability to send text and email notifications to user when issue is received/ completed/etc.

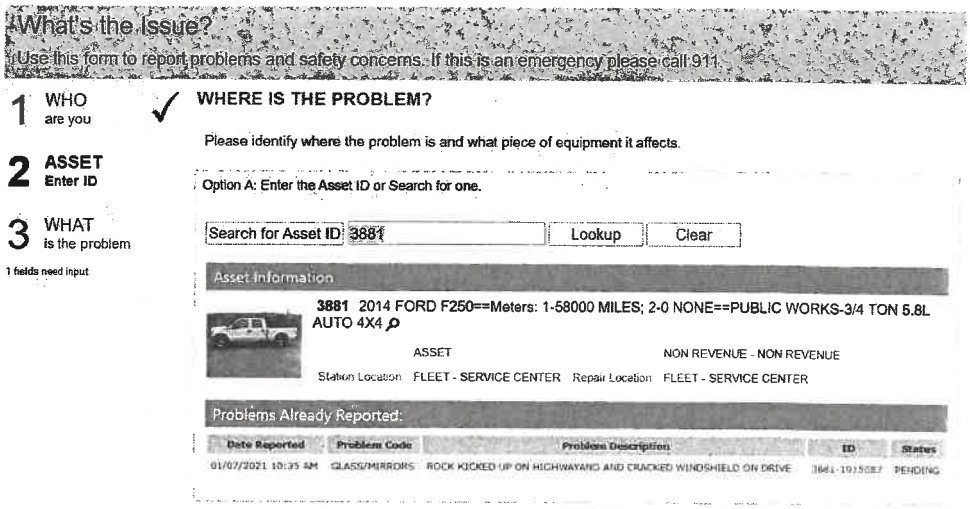
2) *What is the asset?*
Automatically routes to appropriate shop location.

Already reported issues can be seen.

Priorities can be set by individual asset.

3) *What is the problem?*
Only reportable issues relevant to the asset will display.

Reportable issues may also have default priorities, helping to automatically define the priority of the reported problem.



2021 AssetWorks, LLC | All Rights Reserved. www.assetworks.com

Unlimited Service Request Web Portals

FleetFocus provides the ability to create an unlimited number of highly configurable service request portals designed to accommodate a variety of end users such as different departments, customers, service writers, etc.

Each unique portal can be accessed by its own web link and provided to end users, as necessary.

Service Writers

Service writers can use the Service Request portal to eliminate any paper process. Computer kiosks or mounted tablets may also act as virtual service writers to accommodate the reporting of issues.

Mobile

Drivers can report service requests and view the status of existing requests through a mobile application.

Fleet staff can report and assign service requests to work orders through their own mobile application.

WORK ORDER MANAGEMENT

FleetFocus provides inherent workflows for the processing and completion of all work orders. This includes internal maintenance shops, external commercial/vendor repairs, fully integrated inventory management, direct vs indirect labor, operational vs location downtime, and much more.

FleetFocus provides a wide variety of supporting functionality including (but not limited to):

- Work order processing
- Commercial work
- Billing
- Historical costs
- Shop calendar
- Notifications
- Recalls/campaigns
- Warranty
- Accident management

Work Order Tracking

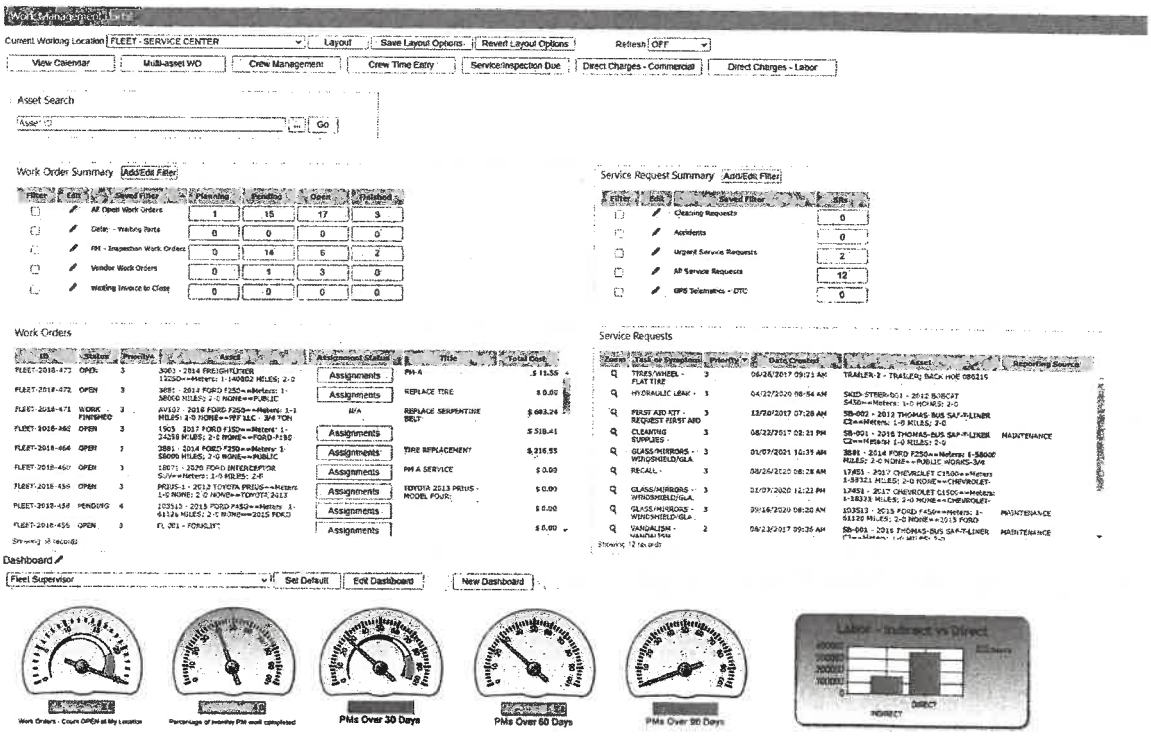
FleetFocus provides inherent workflows for the processing and completion of all work orders, which may be created on-the-fly, from service requests, or auto-generated based on PM Schedules.

Work orders fall into different statuses that determine workflow and responsibility:

- *Planning status*
  - This is the ability to create an estimate work order. Labor, parts, and commercial/vendor costs can be estimated. If the work is completed, actual vs estimated costs can be compared.
- *Pending status*
  - Schedule maintenance work orders can be auto generated in bulk. All PM Services and Inspections remain pending until a technician begins the work. This provides the ability to easily generate all scheduled maintenance, but also manage downtime.

© 2021 AssetWorks, LLC | All Rights Reserved. www.assetworks.com

- *Open status*
  - All work orders currently being worked on remain open until technicians or vendors complete all required tasks. Work orders may be put into delay status to control down time and provide better oversight on all open work.
- *Finished status*
  - When technicians or vendors finish all required tasks, they put the work order into the finished status. Once finished, supervisors or other authorized users can review all cost transactions (labor, parts, commercial/vendor invoices), make edits if required, and close the work order.



Commercial Work

Commercial work can be captured to track vendor invoices for any maintenance (scheduled or unscheduled), parts, and other services. Vendor invoice information can be entered, and the invoice attached to the work order. Vendor contracts may also be tracked, managed, and made required (optional) when entering Commercial Work.

Vendors can be given limited access to submit invoice information for work orders. Submitted invoices can then be reviewed and approved by permissioned users.

Billing

The billing portal allows for an additional step of approval for all cost transactions.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Permissioned users can approve, reject, or reassign cost transactions to a different billing period. These review options can be done real time, eliminating the need to review all cost transactions at end of period.

Cost transactions include:

- Labor
- Parts
- Commercial/Vendor
- Fuel
- Motor Pool
- Usage Tickets
- Recurring Costs
- Special Fees

Optionally customers can connect this portal with their financial system utilizing AssetWorks integration tool, MAXQueue. *Please see Statement of Work included with this response for more details.*

Historical Costs

Historical costs are tracked for all assets and all cost transactions. History is searchable and reportable by any criteria, including task performed. Pre-defined comeback ranges can be set for any tasks and can alert technicians if an asset is back for the same repair within the defined time period. Comeback reports can also be generated or automatically sent at regular intervals to any required personnel.

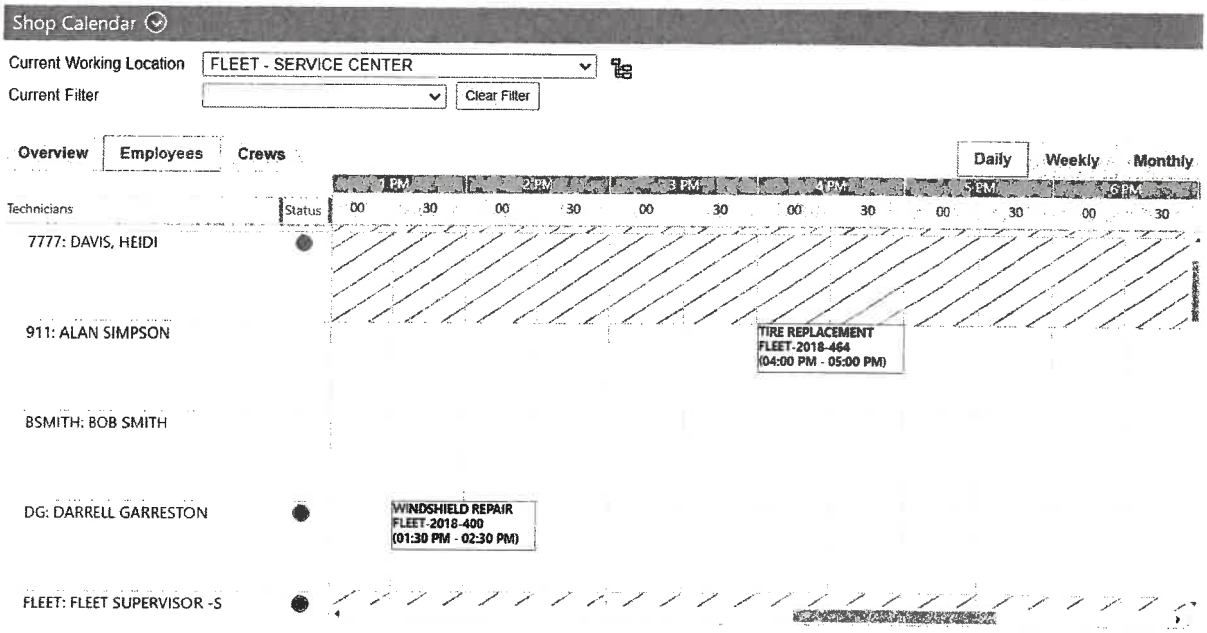
When implementing FleetFocus, historical summary costs or detailed work order costs can be loaded from your previous system. *Please see Statement of Work included with this response for more details.*

Shop Calendar

The shop calendar is where users can plan and schedule work, which includes (but is not limited to):

- Tracking of shop location shifts and technician availability
- Daily, weekly, and monthly views
- Assign work orders and service requests
- Track indirect time to such as training, PTO, etc.
- Schedule work based on technician skill/certification, bay required, time to complete service, etc.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com



Recalls/CAMPAIGNS.

Recalls and work campaigns are supported by generating services requests or work orders en masse. Users simply enter the VIN range and/or other asset criteria along with all work-related details one time (tasks, parts, procedures, attachments), which generates all duplicate requests/work orders for all assets within the defined parameters. Any recall/campaign can be quickly and easily viewed whenever searching an asset, opening a new work order, or entering an existing work order. Supervisors and other permissioned users will have oversight of the total number of recalls/campaigns and their percent to completion.

Warranty Tracking

Warranties are tracked on assets, components, and parts. New and existing work orders display all valid warranty information. Whenever there is a valid warranty in effect, FleetFocus auto-generates the warranty claim, which is then available in the warranty portal for permissioned users to review, settle, and view warranty recovery.

Parts under warranty provide additional notification to technicians that the item must be returned to the parts room. In turn, the parts room receives notification that they are expecting the item to be returned, providing accountability.

Accident Tracking

Vehicle accidents and all related information is tracked including (but not limited to):

- Driver and Vehicle information
- Involved Parties
- Claim Status
- Associated Work Order and Downtime
- Cost information
- Attachments (documents, images, videos)

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TECHNICIAN WORK MANAGEMENT

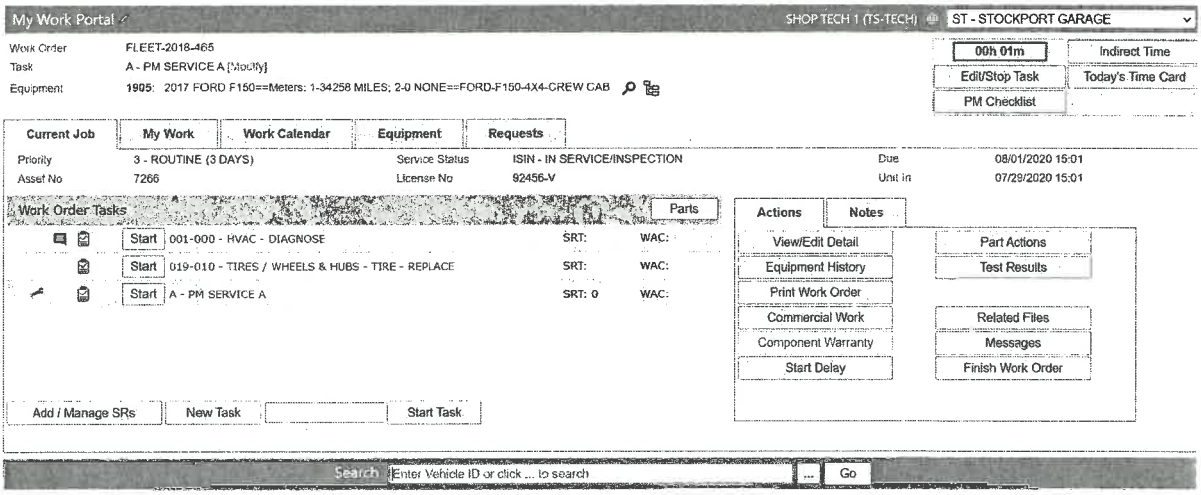
FleetFocus provides an easy-to-use portal for all required technician functions and workflows, which includes (but is not limited to):

- managing assigned work
- asset information lookup
- parts issues/requests
- viewing/managing schedule & timecard

My Work Orders

Technicians can access work orders in a variety of ways:

- *Search*
  - Search for an asset using full or partial ID, license plate, VIN, serial number, etc., and quickly begin working on existing work orders or create a new work order.
- *List View*
  - Work orders formally assigned, created, or accessed through the search appear in this list until completed. This list may be sorted by work order ID, priority, delay status, service status, scheduled appointment, or any combination of these criteria.
- *Work Calendar*
  - Any scheduled work orders can be viewed weekly or monthly and quickly accessed from the calendar.



Work Order Completion

- *Labor*
  - Labor can be tracked to a work order using real-time, after-the-fact postings, or the ability to do both.
  - Labor rates can be defined using built-in logic within the application. This provides the ability to set rates at the following levels:
    - Task
    - Department
    - Employee certification/skills
    - Shop location
    - Default system rate

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

- *Tasks*
  - Tasks can be auto generated for scheduled maintenance services and inspections, reported service requests, or added as required by permissioned users.
  - FleetFocus provides a starter database which includes standard codes such as VMRS repair tasks. Customers may add/remove/modify tasks as needed.
- *Checklists*
  - Checklists may be associated to any task or PM service/inspection. Checklist items may be marked pass/fail and follow up tasks generated for failed items.
  - Checklist items may also require the entry of a test result. This provides the ability to capture measurements, readings, ratings, etc., and pass/fail thresholds predefined. Any entry that fails, auto-generates the follow up task. Data entries are also validated to be used in reporting and analytics.
    - *Example*: a test result for tread depth measurement may be entered for each tire. If an entry or measurement selection is a failure the replace tire task auto-generates. Additionally, this information can be used to build tire wear reports.
- *Parts*
  - Permissions may be defined to allow technicians the ability to request parts, issue parts, or both. Parts may be requested or issued in variety of ways:
    - ***Automatic request***
      - Auto-request of parts/parts kits when a work order or task is generated
    - ***Standard parts***
      - Parts lists that can be pre-defined by task or allow the system to learn standard parts as tasks are completed
    - ***Part look-up***
      - Search by part ID, description, classification, etc.
    - ***Not from inventory***
      - Allows parts not in the database to be requested/issued
    - ***Comments***
      - Parts can be requested by typing a comment for the parts room to fulfill
- *Delays*
  - Start work order delays that can automatically stop down time and provide status updates for supervisors.
- *Commercial Work*
  - Permissioned users can add vendor invoices to work orders to track any sublet work.
- *Attachments*
  - Unlimited work order attachments of any type – documents, images, videos, web links, etc.
- *Notes/Comments*
  - Add notes and comments by task, service request, or to the entire work order.
  - Work orders may also track complaint/cause/correction.

TimeCard

Direct as well as indirect time can be tracked for technicians. Indirect time such breaks, meals, training, etc., can be managed. When used in conjunction with real-time labor, technicians can seamlessly move from task to task whether direct or indirect to create a complete timecard. Timecards may be reviewed and edited by permissioned users. This functionality can also be integrated with our customer's payroll and timekeeping systems to eliminate double entry.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

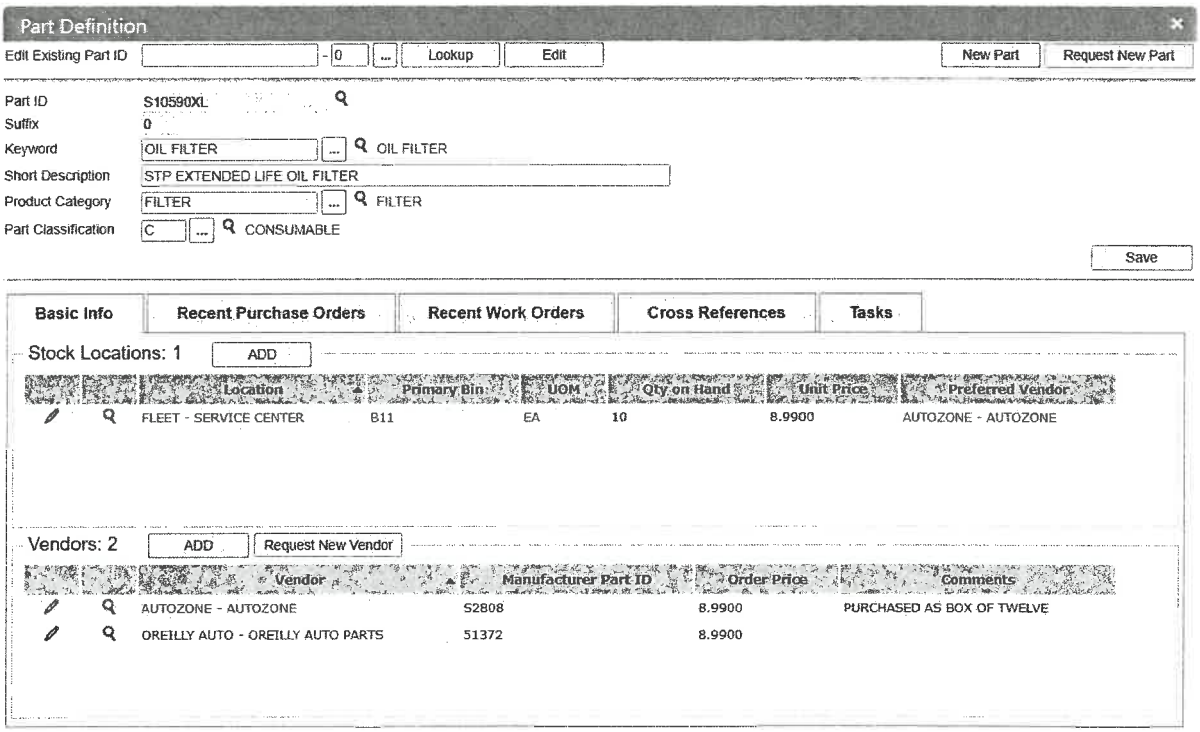
INVENTORY MANAGEMENT

FleetFocus provides fully integrated parts inventory management for an unlimited number of stock locations, which directly connects to work order management; allowing technicians to request parts from an inventory location to a work order. As parts are issued to work orders, quantities on hand are updated real-time and replenishment can be run as required.

Part Records

Unlimited part records can be tracked within FleetFocus. This provides detailed information and inherent workflows such as:

- *Inventory Location*
  - Unlimited inventory & bin locations
  - Average price/LIFO/FIFO
  - Min/Max or EOQ
  - Unit of measure/issue
  - Preferred vendor
  - Unlimited cross-references
  - Stock status
  - Inventory month/count group
  - Markups
  - Part transfers
  - Serialized parts
  - Positional information
- *Vendors*
  - Vendor contracts with spend limit & expiration notifications
  - Warranty
  - Lead times
  - Minimum order quantities
  - Discounts
  - Order price



© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

Requests

Technicians can request parts from one or multiple inventory locations through multiple methods depending on permissions:

- Auto-request of parts upon adding a task or creation of a PM/Inspection work order
- Choose from a task specific pre-populated list of Standard Parts. This list can be pre-loaded and/or allow FleetFocus to learn parts used over time.
- Look up parts by ID, Description, Categorization
- Request parts not from inventory
- Use the comment request option when a part ID is unknown
- Send a part return request to the inventory location

Issues

Parts room personnel can manage part requests for one or multiple inventory locations. These functionalities include (but are not limited to):

- Send part pick-up notifications to technicians
- Issue parts to work orders
- Direct issue parts to assets, departments, and accounts

Replenishment

Parts may be re-ordered by part request or ordered in bulk through replenishment management functionality. Replenishment is triggered by Min/Max or EOQ levels set for each part. Notifications for re-order are sent to the technician and parts room staff. Line items for replenishment may be sent to requisition or purchase order.

- *Requisitions*
  - Create new requisitions & add line items
  - Approve/manage line items
  - Track bids, quotes, proposals
  - Send to purchase order
- *Purchase Orders*
  - Create new purchase orders & add line items
  - Manage blanket purchase orders
  - Receive full or partial quantities
  - Return items

FleetFocus can integrate with your purchasing system to streamline the replenishment process by eliminating double entry and keeping both systems consistent and accurate. This allows requisitions and purchase orders to be initiated within FleetFocus and then managed and received in your purchasing system. This bi-directional integration then receives the items in FleetFocus. This integration also provides an opportunity to sync vendor lists, vendors contracts, account IDs, and more.

Inventory Counts

All parts can be set with inventory months and count groups. Inventory counts can be done real-time without shutting down an inventory location and may be formally assigned or completed ad-hoc. Completed counts can be reviewed by authorized users and recount and adjustments made as required for discrepancies.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Cores

Parts may be classified as cores for the purposes of tracking core credits and rebuilds. When a part classified as a core is replaced, the technician and parts room receive notifications providing accountability and oversight.

FleetFocus contains out-of-the-box 'rebuild work order' functionality, which tracks all parts and labor whether the work is done in-house or sublet. The part is automatically added to inventory as a 'new rebuilt part' upon completion of a rebuild work order.

MOBILE APPLICATIONS

FleetFocus provides mobile options for a variety of users and different workflows through our MobileFocus suite of mobile applications.

The main apps included with **MobileFocus** are: *SmartApps* | *Fleet Connect* | *EDGE*

SmartApps provide a suite of mobile solutions allowing users access from any mobile device with connectivity.
Each SmartApp is integrated into the FleetFocus application and supports a specific FleetFocus functionality. The following is a list of available SmartApps:

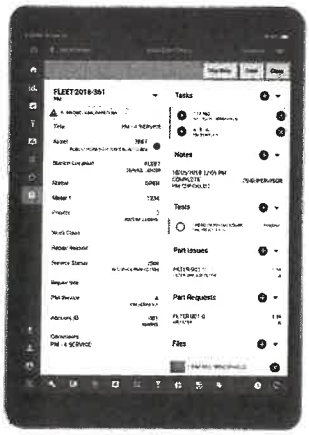


- *Work Center*
  - Provides technicians the ability to complete work orders by capturing things like labor, parts, notes, etc., on a mobile device.
- *My Inventory*
  - Parts room personnel can complete assigned inventory counts for any inventory location.
- *Dashboards*
  - Displays key performance indicators (KPIs), helpful for showing metrics and reportable data on the go.
- *Reservation Center*
  - Create a motor pool reservation that integrates directly with the FleetFocus Motor Pool module, KeyValet automated key box, and Tapn'Go keyless vehicle entry.
- *Inspection Checklist*
  - Complete on-demand checklists like pre-trip and post-trip inspections, capture test results, and more.
- *My Vehicle*
  - Drivers can access authorized vehicles and equipment to report service requests, capture meter readings, view current/pending/past work orders, and view vendors for sublet maintenance.
- *Collisions*
  - Report an accident and capture all related information such as involved parties, vehicle/equipment, photos, etc. This integrates directly to the FleetFocus Accident functionality to be linked to a work order.
- *Yard Check*

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

- Complete on-demand checks allowing users to update meter readings, enter service requests, and capture condition ratings for vehicles and equipment.

Fleet Connect

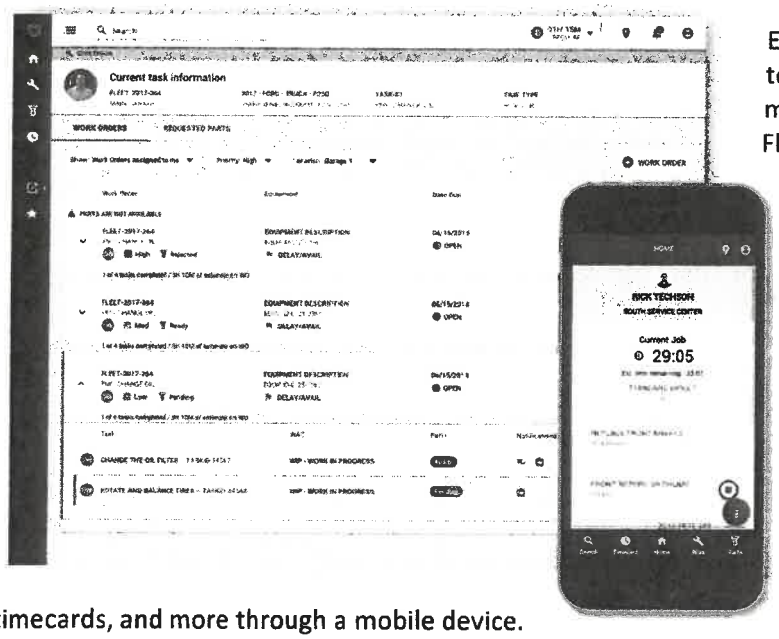


AssetWorks offers Fleet Connect, a store and forward mobile application which provides many workflows and functionalities. While in a disconnected environment all transactions are queued and as soon as connectivity is re-established (3G, 4G, 5G, Wi-Fi) the data is seamlessly pushed to the server, no user interaction required. Fleet Connect is available on iOS, Android, and Windows 10 devices. Functionalities available in Fleet Connect include:

- Work orders
- Service requests
- Parts issues
- Inventory counts
- Pick lists
- Dock receipts
- Put-away cards
- Label printing
- Test results
- Meter readings
- Asset management
- Time clock
- Assignment verification

Edge

FleetFocus EDGE is a fully connected mobile solution providing Technicians and Supervisors the ability to complete their workflows through a mobile responsive design.



EDGE provides ease of accessibility to users by simply logging into the mobile site with their existing FleetFocus IDs.

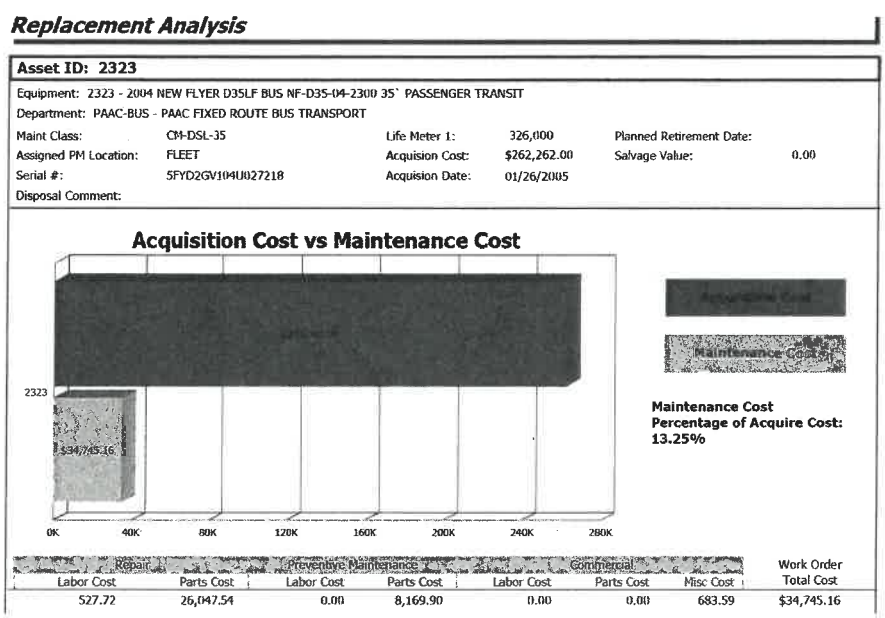
Example: a technician can log into FleetFocus from a computer to review assigned tasks, use a tablet to access EDGE for completing a work order on the shop floor, and then later use EDGE on a smartphone to review their timecard.

For Supervisor workflows EDGE provides the ability to manage work orders, assign work, review timecards, and more through a mobile device.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

REPORTING & ANALYTICS

Standard Reports



Replacement Analysis

Asset ID: 2323

Equipment: 2323 - 2004 NEW FLYER D35LF BUS NF-D35-04-2300 35` PASSENGER TRANSIT
Department: PAAC-BUS - PAAC FIXED ROUTE BUS TRANSPORT

Maint Class:	CM-DSL-35	Life Meter 1:	326,000	Planned Retirement Date:	
Assigned PM Location:	FLEET	Acquision Cost:	$262,262.00	Salvage Value:	0.00
Serial #:	5FYD2GV104U027218	Acquision Date:	01/26/2005		

Disposal Comment:

Acquisition Cost vs Maintenance Cost

Repair		Preventive Maintenance		Commercial			Work Order
Labor Cost	Parts Cost	Labor Cost	Parts Cost	Labor Cost	Parts Cost	Misc Cost	Total Cost
527.72	26,047.54	0.00	8,169.90	0.00	0.00	683.59	$34,745.16

FleetFocus utilizes Crystal Reports as its main reporting tool, providing over 350 out-of-the-box reports that are delivered through the application's web portal.

All standard reports may be modified, and any number of custom reports can be created. Reports maybe scheduled, emailed, and exported to many industry-standard formats, such as .docx, xlsx, .pdf, .txt, .csv, .xml, .txt, etc.

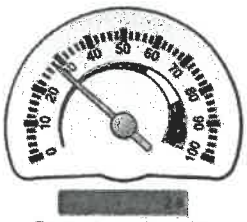
Report favorites may be created and saved by users that allow access to commonly referenced data from anywhere within the system.

Ad-Hoc Reports

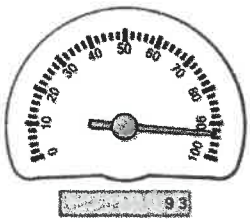
Users without Crystal Reports experience or access to the development software can utilize the Ad-Hoc Reporting tool to create reports directly within the program. Ad-Hoc reports may be saved, shared, exported, and are viewable directly within the web portal, providing real time access to data. All database tables, including user-defined fields, are reportable and AssetWorks does not restrict the data. Reports may also be embedded on any portal screen of a user's workflow for auto-update and display of multiple reports in a single view.

Dashboard Key Performance Indicators (KPIs)

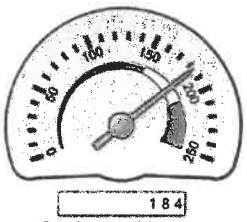
Key Performance Indicators can be displayed within a Dashboard to provide gauges and charts that graphically communicate any reportable data. Warning and alert ranges may be set on a KPI to send a notification when thresholds are reached. KPIs may also be configured with drill-down capability to link to reports and other areas of the application. Charts and gauges may be added to any report as required through the ad-hoc reporting tool.



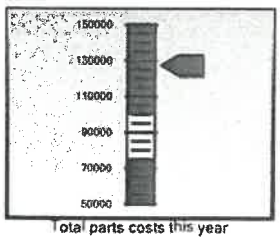
Parts at reorder point



Vendor Contract Compliance Percentage



Stock-outs this year



Total parts costs this year

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Performance & Replacement Analysis

FleetFocus provides out-of-the-box performance & replacement analysis. These functions use the data already within the application to allow users to create replacement lists, define performance models, and generate scorecards for decision makers. Replacement lists can then define estimated replacement costs and timelines.

Equipment ID: 103513 - Totals and Averages

Totals and Averages

Months In Service	231/144.54 **AVG.**	Cost Capital	0/0 **AVG.**	Equipment Capital	76282/20289.46 **AVG.**
Condition Rank	3/3.04 **AVG.**	Fuel Consumption	715.40/2282.05 **AVG.**	Maintenance Cost	79455.68/7409.80 **AVG.**
Shop Downtime Hours	7684.57/1052.26 **AVG.**	User Downtime Hours	7155.87/886.21 **AVG.**	Cost per Usage	2.55/3.04 **AVG.**
Oil Consumption	0/0.24 **AVG.**	Breakdowns per Month	0.02/0 **AVG.**	Life Total Meter 1	61126/67278.26 **AVG.**
Maintenance Cost per Usage	1.30/0.12 **AVG.**	Fuel per Usage	0.01/0.04 **AVG.**		

FUEL & FLUID MANAGEMENT

FleetFocus includes fuel and fluid management which provide the ability to manage out-of-the-box functions like:

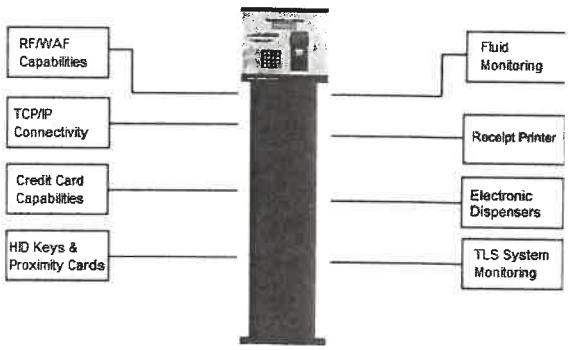
- Ordering
- Receiving
- Automatic calculation of inventory balances
- Product transfers among tanks
- Tank stick readings
- Totalizer readings
- Tank balance reconciliation
- Internal and commercial fuel transactions
- Fluid issues to work orders

Optional Fuel & Fluid Modules

FuelFocus: Fuel Management System

FleetFocus is the only Fleet and Equipment management system to offer a fully integrated, real-time fuel management system: **FuelFocus**

FuelFocus processes all fuel transactions in real-time to the FleetFocus database. FuelFocus validates all transactional data like vehicle, user and department ID, meter readings, dispensing fluid, and fuel tank capacity against values stored in a single, centralized FleetFocus database. Real time integration provides tangible benefits including efficiency, cost savings, data validation, oversight, and control.



© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

FuelFocus: EV (Electric Vehicles)



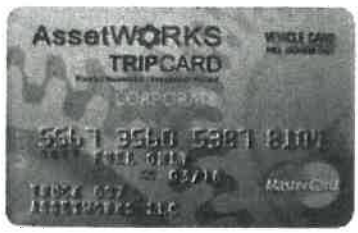
FuelFocusEV allows fleet managers to maintain total control and visibility of their fleet data as modern technology pulls fleets to electric vehicles (EV) and charging infrastructure.

Teaming up with ChargePoint, AssetWorks has created a comprehensive hardware and software package to monitor, alert and record all relevant data from your electric vehicle charging operations.

AssetWorks offers a full suite of hardware solutions manufactured by chargepoint+

When purchased exclusively through AssetWorks, the hardware comes fully integrated with the AssetWorks FleetFocus and FuelFocusEV systems.

TRIPCard: Commercial Fuel & Maintenance Transactions



The AssetWorks TRIPCard offers fleet organizations a whole new way of managing fuel and maintenance related purchases for employees on the go.
The TRIPCard features data integration directly into FleetFocus within hours of the transaction posting. This provides increased benefits, such as improved accountability and enhanced authorization controls, with the flexibility and portability of a credit card. The functionality is incorporated right into the TRIPCard's name: Timely, Reportable, Integrated, P-Card (Purchase Card).

FluidFocus

AssetWorks offers standard integrations for fluid management, which provide real-time issuing of fluids to work orders when dispensed. The FluidFocus module connects FleetFocus to GRACO or LINCOLN lube fluid management systems.

3rd Party Integrations

FleetFocus can also integrate with your existing internal fuel/fluid system or commercial fuel card to automate the capture of transactions electronically. Integrations can be easily built using the AssetWorks MAXQueue integration tool.

Note: commercial and internal fuel transactions can be manually imported in bulk into the FleetFocus system using the out-of-the-box Data Loader tool.

INTEGRATIONS

FleetFocus can connect to 3rd party applications utilizing our integration tool: MAXQueue. Integrations can be built one way or bi-directional and can include logic to handle complex workflows to increase efficiency and manage data consistency. AssetWorks has extensive experience building integrations for many 3rd party applications such as:

- Finance
- HR
- Timekeeping
- Payroll
- Fuel/fluid systems

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Standard Integrations

AssetWorks has developed out-of-the-box integrations for many commonly used 3rd party applications, which include:

Inventory Management	*RFID Inspections*	*Fluid Management*	*Electric Vehicle Charging*	*Telematics*	
Integration Only	Integration Only	Integration Only	Integration Only	Reseller & Integration	Integration Only
Integrated Business Solutions.	ZONAR Systems	LINCOLN GRACO	chargepoint+	verizon connect GEOTAB	samsara GPSINSIGHT Ibtechnology, inc.

FLEETFOCUS: OPTIONAL MODULES

Customer Access

The Customer Access portal provides departments the ability to access relevant information to reduce the number of phone calls, emails, and other administrative tasks for a fleet organization. Authorized department users can access the following information based on permissions:

- *Vehicles/Equipment*
  - Basic asset data
  - Service requests
  - Usage tickets
  - Assign operators
  - Meter readings
- *Work Orders*
  - Shop location(s)
  - Work order statuses
  - Work order postings
- *Operators*
  - Create new operators
  - Unassign operators
  - Update operator contact & personal data
  - Update training & license data
  - Work order notes

Motor Pool

The Motor Pool module provides the ability to track unlimited pool locations for reserving and managing pool vehicles and equipment. Authorized users can dispatch, return, bill, and manage many other motor pool functions from within FleetFocus, eliminating the use of spreadsheets and other systems.

Motor Pool Reservations (Web)



The Reservations module is an add-on Motor Pool module which empowers customers to make reservations through the FleetFocus web portal.

This helps to greatly reduce phone calls and emails when making reservations at Motor Pool locations. Reservations can be managed and set for approval if required.

Motor Pool Reservations (Mobile)

As part of the optional MobileFocus suite of apps, the Reservation Center app provides reservation capabilities from any mobile device with connectivity.

2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

KeyValet

KeyValet is a key box that works in conjunction with the Motor Pool module to dispense keys and make on-the-fly reservations.



This option eliminates the need for staff to manage a Motor Pool location and/or provide after-hours access to vehicles and equipment. Boxes can be ordered in different sizes and configurations to accommodate not only keys, but also the reservation of other items from a secure box.

Allocation & Assignment

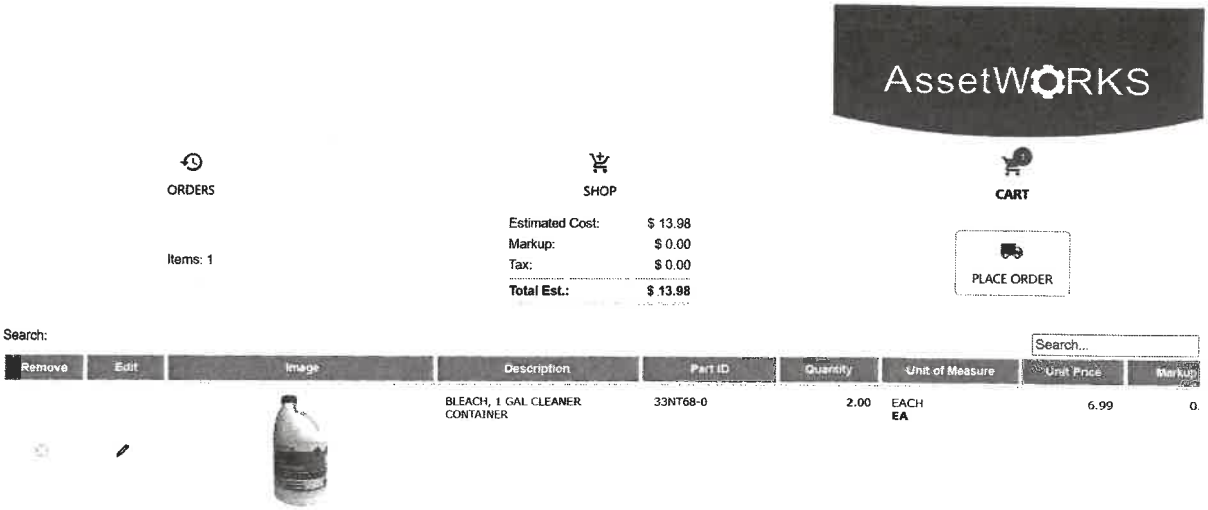
The Allocation & Assignment module provides quartermaster/logistics functionality for the purposes of assigning and tracking items. Authorized users may assign items to individuals, locations, departments, and assets. Assignments may be set with expiration dates, account/billing codes, notes, condition, and other relevant information. Assignment statuses may be updated for items that are returned, broken, stolen, expired, or lost. This module provides two separate portals; one for facilitating requests, and one for managing the requests and existing assignments.



Inventory Catalog

The Inventory Catalog module provides online ordering from permissioned inventory locations. Users can select items to be added to their cart for checkout, save items as favorites for easy re-ordering, and track the status of their orders.

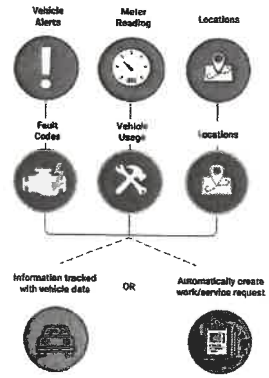
© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com



Telematics/GPS

The Telematics module gives FleetFocus the functionality to integrate with any third-party telematics hardware. This module works with GPS/AVL and fuel systems linked to a vehicle's onboard computer to collect telematics data.
This includes the ability to capture not just GPS location, but meter readings, and diagnostic trouble codes.

DTCs can be set to send alerts, as well as auto-generate service requests and work orders. In addition to this functionality, customers may optionally add mapping to FleetFocus to view the location of their vehicles.



As previously mentioned, AssetWorks offers standard telematics integrations:

- *Reseller & Integration*
  - NetworkFleet
  - Verizon Connect
  - Geotab
- *Integration*
  - Samsara
  - GPS Insight
  - LB Technology

Capital Asset Management (CAM)

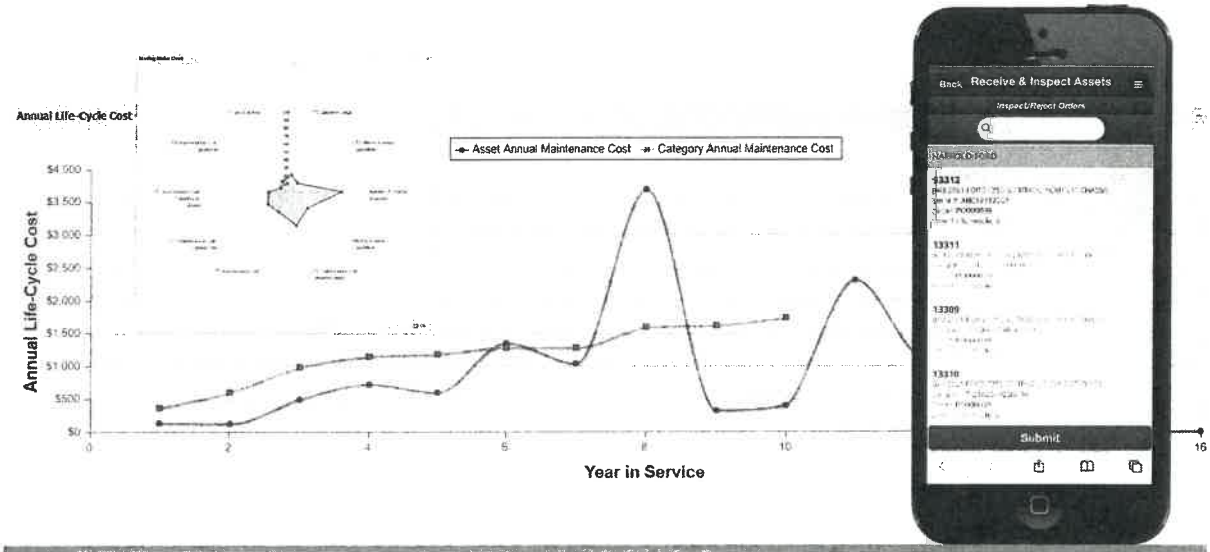
The CAM module greatly expands and enhances the management of the life cycle of an asset. CAM has two major functional components: 1. procurement and disposal; and 2. analytics & planning. Their functionality includes but is not limited to:

CAM Functional Components

Procurement & Disposal		Analytics & Planning	
• Build selector list for specifications & options • Request & approve assets • Produce & assemble assets from components	• Create and manage disposal steps • Re-market assets through auction functionality • Reconcile the sale of the assets	• Determine optimal time to replace assets based on economic life-cycle • Forecast when assets will come due for replacement • Forecast future maintenance & operating costs	• Build long and short-term capital plans • Manage replacement, growth, & initiative requests • Prioritize assets for replacement • Review, approve, & manage plans

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

CAM is an independently deployed application integrated into FleetFocus. The data used in the analytics and planning functionality is supplied from FleetFocus, and newly received assets are automatically created in FleetFocus, ready to be placed into service and managed until ready for disposal.



ADMINISTRATION & PERMISSIONS

Admin Functions

Administrative users can be given select access to perform various functions throughout the application. These functions help to not only manage the FleetFocus application, but also provide the flexibility to configure the system to fit an organizations workflows and business process, and include (but are not limited to):

- Making fields required vs optional
- Highlighting required & attention fields
- Creating validated choice lists for text fields
- Hide buttons & fields
- Make fields read only
- Rename or repurpose fields
- Managing change requests for end user data updates
- Setting permissions & rights
- Managing user IDs & related data
- Managing security settings
- Control of portal settings & inherent workflow configurations
- Activity logs & audit trails
- SSO (Single Sign On)

Data Loader

Permissioned users can complete bulk updates of information, as well as add new data utilizing the Data Loader Tool. This function provides the ability to create Excel data templates for the simple loading/updating of any information within FleetFocus.

User Permissions

All security and permissions are role based within FleetFocus. This provides the ability to set system and data access at virtually any level. All permissions are pervasive throughout the application including mobile apps and reporting. The extensive control of rights and permissions allows for admins to easily manage unlimited users.

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

4.3.10.2 TECHNOLOGY PRODUCTS

On-premises Customers: (See System Requirements and Compatibility in the Appendix of this response for more details.)

AssetWorks FleetFocus solution is a fully web-based solution available as self-hosted or cloud-hosted via our secure Data Center. At time of installation, AssetWorks recommends the customer set up three environments: Production, Test and Training. For the vendor-hosted environments, FleetFocus requires no special accommodation for DR and failover and works in any compatible environment including a virtualized one.

The FleetFocus application exists as an extensible layer of Windows Services, providing base logic and workflows, which is then published to the end user through Microsoft's IIS web server. FleetFocus is developed using available programming languages and software applications, including:

- **Presentation (.ASPX pages):** HTML, DHTML, JavaScript, XML
- **Components/Executables:** .NET, C, C++, C#, XML, SQL, Web Services
- **Database:** Oracle or SQL Server
- **Reports:** Crystal Reports Server OEM Embedded Edition (RAS)

The FleetFocus application consists of the following tiers:

- **RDBMS:** Used to store all system, production, and reporting data. FleetFocus supports either Oracle (11g R2 or 12c) or Microsoft SQL Server (2012, 2014, 2016) based databases running on their own server(s); virtual environments supported.
- **Application:** The core logic of FleetFocus exists as one or more Windows Services running on an application server. The application is hosted on Windows Server (2008, 2012, 2016 either 32- or 64-bit). The application may be installed in a load-balanced multi-server environment.
- **Web Presentation:** The Web layer of FleetFocus is a .NET Framework (4.6.2 or later) based browser layer, hosted on Windows servers (2008, 2012, 2016 either 32- or 64-bit) running Microsoft Internet Information Services (IIS) 8.0 or later. The web elements may be installed in a load-balanced multi-server environment.
- **Integration:** AssetWorks proprietary integration engine, MAXQueue, serves as the go-between, linking FleetFocus to all external systems and processes. Any open protocols such as web services (REST or SOAP), ODBC, tnsnames, SFTP, flat files, etc. is supported
- **Reports:** FleetFocus employs Crystal Reports Server OEM Embedded Edition (RAS) as its reporting platform and is directly integrated into the FleetFocus modules. The Reports server requires a Windows (2008, 2012, 2016) operating system.
- **Client:** The typical end user accesses the system using Microsoft Edge, Internet Explorer, Chrome, Firefox, or Safari (on iPads).
- **Mobile Client:** FleetFocus includes MobileFocus, a Windows Mobile based suite of applets that extend the functions of FleetFocus into mobile environments. With multi-browser support and the mass availability of tablets, any mobile device can be used provided it can maintain internet connectivity. MobileFocus' differentiator is that it's store and forward capable.
- **Administrative Client (GUI):** The FleetFocus GUI is a graphical user interface component that runs on the desktops of functional system administrators and is optionally used for batch

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

processing, UI editing (e.g. label renames, making fields required, altering filter/sort options), and other admin-level functions.

- **SSO Compatibility**: FleetFocus is currently compatible with the listed methods for Single Sign On. For method not listed, please inquire:
    - Azure Active Directory (*version 18.x forward)
    - Windows Authentication
    - Central Authentication Service (CAS)
    - Active Directory Federated Services (ADFS)
    - CA SiteMinder
    - Shibboleth

Smart Phone Wireless Access
The suite of SmartApp solutions allows users to access the FleetFocus application from any HTLM supported device like a smartphone or tablet. Each module is integrated into the FleetFocus application and supports a specific FleetFocus functionality. Using the applications, drivers and other users can update FleetFocus records and view important fleet information without needing direct access to FleetFocus.

Highly Scalable
FleetFocus utilizes an online transaction processing (OLTP) architecture in conjunction with a multi-threaded core application promoting a massively concurrent transactional environment ensuring many users (up to 1000s) may simultaneously query or act upon the same data sets while rigorously maintaining data integrity. All data structures are designed utilizing industry best practices and data normalized for optimal efficiency, which means that any number of additional departments may be added to the County's operating environment at multiple points in the future. This includes the ability to silo data structures so that each department may operate only seeing their assets, codes, work orders, requests, etc. while at the same time an administrator may have access to all data. The system is extensively scalable to meet a specific user's interface needs, a functional group's access rights, or a global setting. That is a single field may be hidden, made required, set to view only, renamed, repurposed, and more.

The proposed FleetFocus application is a fully integrated, modular solution providing cradle-to-grave asset maintenance management. FleetFocus is a COTS product delivered out-of-the-box with the following modules: Asset Management, Parts Inventory & Purchasing Management, Work Order Management, Labor Management, Warranty Management, Billing Management, Commercial Repair Management, Fuel Management and the Reporting Management module. FleetFocus is highly customizable and capable of supporting virtually any workflow or business process. In addition to the listed base modules, FleetFocus will be delivered with Reporting Module, Shop Activity Module, Customer Access Module, KPI/Dashboards Module, Crystal Reports Server OEM Edition, Crystal Reports Professional Edition for Adhoc.

The FleetFocus system is comprised of the following components: the Application, the Web Modules, and MAXQueue.

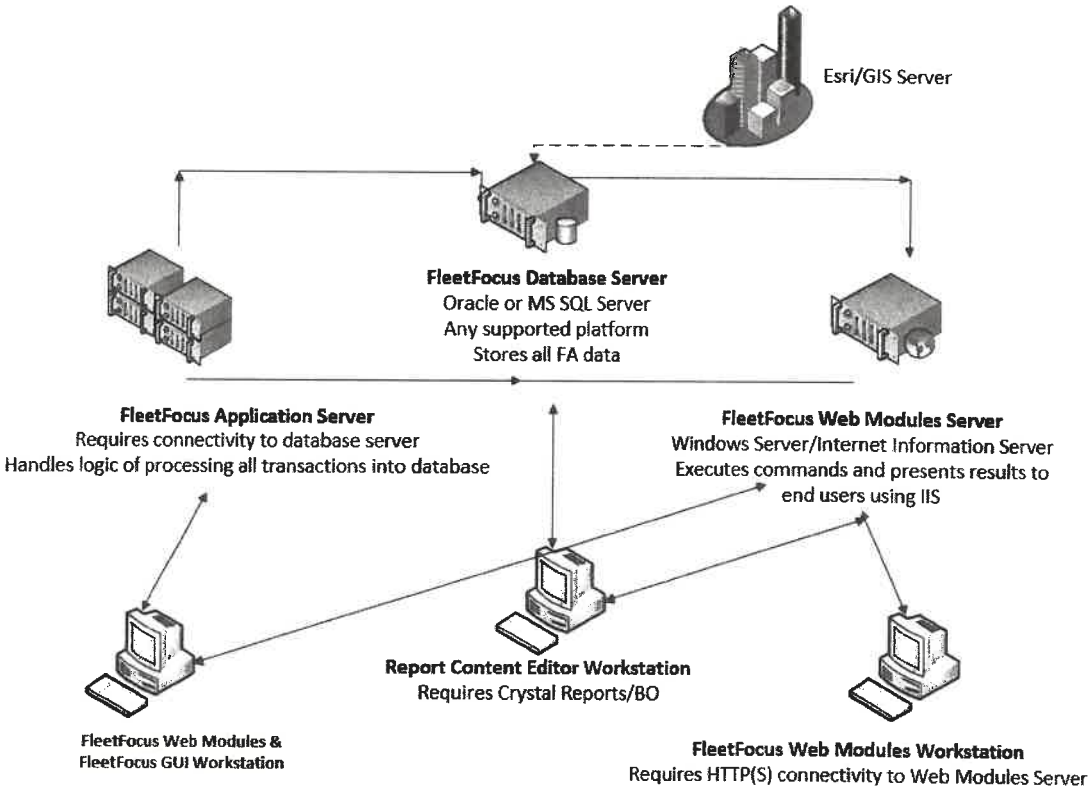
- The Web Modules is a fully integrated, multi-tiered web-application
- MAXQueue is an integration tool that provides interfacing and automation opportunities

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

The system is supported by a database server, application server and web server.

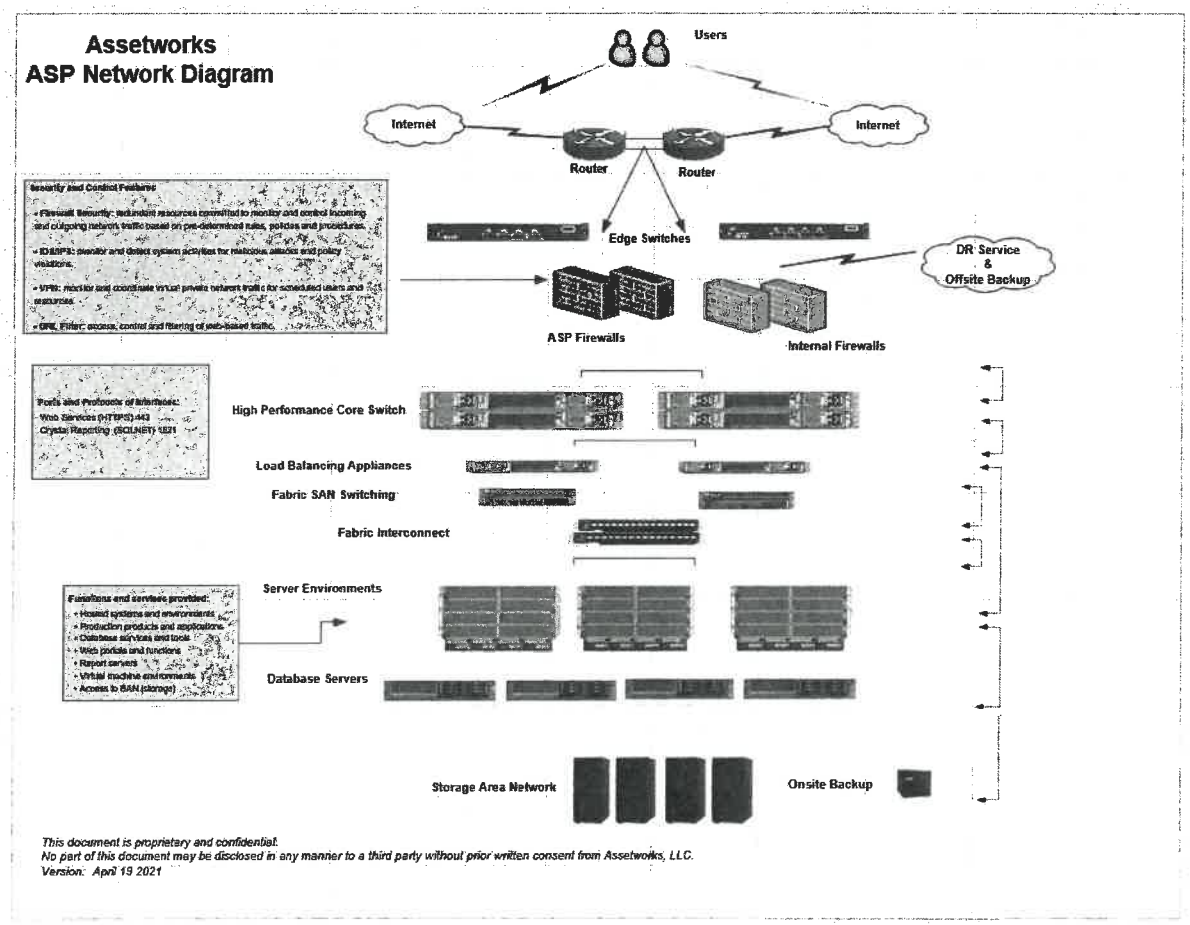
- The database server provides data access and storage which is part of the data access layer.
- The application server acts as part of the business logic layer, which implements the business rules for the product.
- The web server acts as part of the front-end presentation layer, providing a central web interface for your components.

The addition of specific modules allows your organization to improve performance and efficiency of fleet management. Installed modules can be set up to be accessed by everyone in your organization - from mechanics tracking work orders or labor, to managers pulling reports essential for better vehicle and cost management, to external customers wishing to view information and enter incidents or complaints.



© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Hosted Customers: Please see Data Center Overview in Appendix of this response.



4.3.10.2.1 AD HOC REPORTING TOOLS

AssetWorks provides a series of Ez_Views that join many of the tables needed to support most reporting functions. This makes it easy for users to write their own adhoc reports without having to have in-depth knowledge of the over 500 tables in the application. Each view is organized around commonly reported on data sets (work order, jobs, labor, units, unit history, etc..) FleetFocus is a large and complex application and we have many customers that do their own reporting using these views and learned knowledge about the database.

Users without Crystal Reports experience or access to the development software can utilize the Ad-Hoc Reporting tool to create reports directly within the program. Ad-Hoc reports may be saved, shared, exported, and are viewable directly within the web portal, providing real time access to data. All database tables, including user-defined fields, are reportable and AssetWorks does not restrict the data. Reports may also be embedded on any portal screen of a user's workflow for auto-update and display of multiple reports in a single view.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

4.3.10.2.2 BUSINESS INTELLIGENCE TOOLS

From a reporting and compliance perspective, Dashboards are widely deployed through the core business intelligence module; dashboards graphically display the results of system-generated Key Performance Indicators (KPI). WVDOT users will taught how to create their own KPI's and assign those KPI's to application users. Variables can be used to restrict the KPI to a particular location, department or other unique identifier. When executed the results are displayed on the Dashboard grid, with a spark-line graph showing the results of the most recent iterations. Users will be able to drill into any iteration and view a list of records that make up that KPI result. Dashboards can be linked to any screen, creating a work-flow response to view specific records behind the dashboard. Fleet customers and external users can be given access to FleetFocus through the Customer Portals. Any FleetFocus screen can be assigned to the portal, but some screens like the Customer Unit View have been specifically designed to make it easy for customers to view information about their assigned fleet assets.

AssetWorks FleetFocus is intended to be the 'system of record' for all asset information. FleetFocus utilizes Crystal Reports as its main reporting tool and provides almost 300 out of box reports through the Reporting module. Reports cover a wide range of topics, including but not limited to, compliance (employee standards, PM/inspection timeliness, asset condition, etc.) inventory controls, purchasing, work management, cost analysis, billing, warranty, utilization, fuel, etc. All out of box reports may be modified and any custom report created as well. Reports may be scheduled, emailed, and exported to many industry standard formats such as .docx, xlsx, .pdf, .txt, .csv, .xml, .txt, etc. Report favorites may be created and saved by users to allow access to commonly referenced data from anywhere within the system with just two mouse clicks. FleetFocus also includes an optional Ad-Hoc Query tool. This module allows end users without Crystal Reports experience or access to the development software to create reports directly within the program. Ad-Hoc Query reports may be saved, shared, exported, and viewable directly within user portals to provide real-time accesses to data uniquely important to each user. FleetFocus' Dashboard module provides gauges and charts that graphically communicate any key performance indicators. Warning and alert ranges may be set with drill-down capability, and access to gauges and charts may be granularly controlled through access rights. It is important to note that AssetWorks imposes no database restrictions, except disallowing direct ODBC connection to production, and supports the use of any customer preferred third-party reporting software.

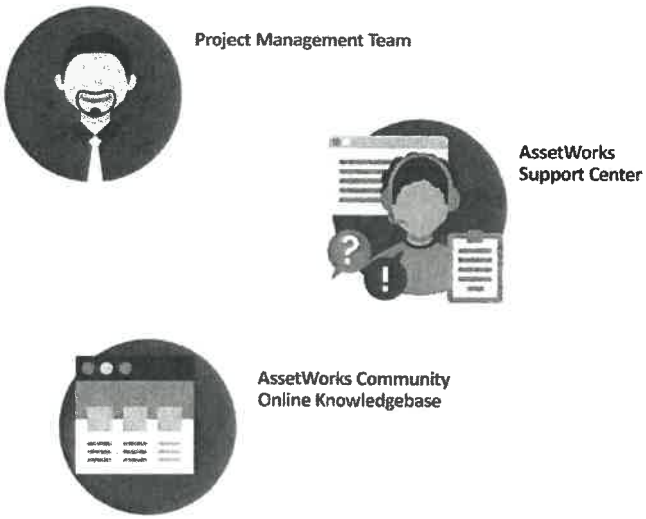
© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

4.3.10.2.3. PRODUCT MAINTENANCE

New Releases and Patches:
Because of our diverse customer base, we have developed important reciprocal relationships with our customers that drive how the application is developed and the direction it takes. With that philosophy in mind, AssetWorks has employed a strategy of 'customer-equality'. As the leading provider of enterprise asset management software for both the public and private sectors, AssetWorks is in the enviable position of claiming some of the nation's largest organizations as customers. But as a way to confirm our commitment to *all* of our customers, regardless of size or budget, AssetWorks offers all enhancements and modifications to the base system to all customers. We want all customers to benefit as a group from the development efforts sponsored by others. New enhancements and features made to the base system are optionally available to all customers at the time of release by the use of module flags and application controls. Customers are given the option of utilizing the new feature or not.

Additionally, those enhancements not specifically sponsored by a customer, but deemed to be beneficial to the overall mission of the application, are compiled into a list and voted on by the entire User Community during the respective Annual User Conferences. A selection of those features or enhancements receiving the most votes, are developed "gratis" by AssetWorks and offered as part of the general release. *We believe this strategy offers the best value to our customers and reinforces our commitment to the asset management industry sector.*

There is typically one scheduled major release a year and intermittent 'patch' or fix releases. Customers are always given advance notification of all releases. All customers who are current on maintenance may access the releases and patches. AssetWorks recognizes the hurtles some organizations face when upgrading a production application and are sensitive to keeping upgrades to a minimum and making those upgrades as easy as possible. AssetWorks has developed an InstallShield based upgrade application that automates most of the process. Additionally, because of the web architecture the upgrade need only be applied once to the production environment and does not need to be rolled out to individual user machines. With this approach it is possible that an upgrade can be applied and operationally deployed in less than a half a day.



Please see Post Implementation Support in the Appendix of this response.

2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

4.3.10.2.4. FUTURE DIRECTION

The success of AssetWorks is our ability to work collaboratively with our customers. The input of our customers drives the product. AssetWorks works collaboratively with its customers to develop our roadmap for our software solutions. Currently, the short-range plans for the proposed EAM solution (subject to change) include:

- MAXQueue and Notifications features for ease-of-configuration
- Shop Activity, User experience updates in new portals: Supervisor portal, Storekeeper portal
- Configuration migration tool: ability to move databases and migrate configurations
- Update to Ad Hoc: new features in Ad Hoc query portal
- Administrator Portals: Enterprise portal updates to continuing administrator features, new styles
- Mapping: Ability to show ESRI tiles and icons, and improved mapping performance.
- Mobile: A persona driven workflow in Mobile that will reduce the number of clicks required by an end-user and improved performance.

Additionally, AssetWorks remains 'plugged in' to the changes in compliance and reporting for our public sector.

AssetWorks publishes a roadmap annually showing our plans for the upcoming release and the following years release. AssetWorks release an annual major release that has a combination of AssetWorks sponsor enhancements and technology improvements, bug fixes, and customer sponsored enhancements. The roadmap is subject to change as client paid for enhancements will take precedence over our standard R&D activities.

By way of example we have listed a small number of items which are currently scheduled into our roadmap (subject to change) and with the view of being developed for major release 2022. These include:

Functional

- New admin frames for audit processes
- Privilege changes to disposing of assets
- FleetFocus Forms
- New enhancements on controlling user roles
- Gadgetized layouts for easy user configuration of web portals/dashboards
- Direct Commercial Charges button
- Direct Labor Charges button
- Asset Management portal for asset summaries and user friendly New Asset creation using templates
- Fleet Connect Mobile App with Store and Forward capability for use in disconnected environments
- SmartApps – suite of apps for drivers/operators

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Technology

- UI/UX Enhancements within the FleetFocus products and continuation enhancements to various screens
- Database and Server Certifications
    - Certification with Oracle 19 and MSSQL 2019
- Enhancements within our new mobility product – FleetFocus Edge

Integration

- Customer Interfaces
- Location specific updates for an Asset status

AssetWorks also have a number of initiatives which fall under our roadmap, and which includes work with our ChargePoint partnership and development with our Telematics partners. As a business we also look to be at the forefront of development and the diagram below shows some of the industry firsts within our Fleet and product evolution.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 5 - REFERENCES

The following references are offered based on comparative business processes, but the WVDOT is welcome to speak with any AssetWorks customer. Please note: AssetWorks does not release contract value without express permission of the customer.

State of Virginia, Department of Transportation
Brian Marshall, Fleet Director / Maintenance Division
Tel: 804-317-5266/ Email: brian.marshall@VDOT.Virginia.gov
Overview: VDOT tracks and manages over 35,000 vehicles and pieces of equipment using FleetFocus. The State also operates a fueling interface as well as an ERP interface to SAP and a Wright Express fuel card integration.

State of Connecticut, Department of Transportation
Jim Chupas, Director of Maintenance & Equipment Operations
Tel: (860) 594-2639/ Email: james.chupas@ct.gov
Overview: The CTDOT tracks and manages over 3500 vehicles and pieces of equipment across 10 maintenance locations using FleetFocus. CTDOT also operates a fuel management integration as well as GPS/AVL.

State of Washington, Department of Transportation
Chris Case, Assistant Fleet Manager
Tel: 206-550-7915/ Email: casec@wsdot.wa.gov
Overview: A customer since 2002, the DGA has a number of third-party vendor interfaces including financial and payroll to statewide systems and has recently implemented AssetWorks fully integrated, real time fuel management solution; FuelFocus.

State of Oregon, Department of Transportation
Darin Weaver, District Supervisor
Tel: (503) 986-2734/ Email: darin.a.weaver@odot.state.or.us
Overview: ODOT tracks and manages over 6000 vehicles and pieces of equipment also operating 52 fueling sites using AssetWorks fully integrated, real time FuelFocus.

State of Texas, Department of Transportation
Bob White, Fleet Manager
Tel: 512.487.9049/ Email: robert.r.white@txdot.gov
Overview: Over 20k+ assets, 30 maintenance location, GPS integration, ERP/HR interfaces
Comprised of 25 districts across the state, TxDOT manages not only the construction and maintenance of the immense highway system, but also oversees the aviation, rail and public transportation systems in the state. In efforts to improve the service they offer the citizens of Texas, TxDOT has begun modernizing its systems and business practices to operate more efficiently. This includes moving away from disparate and legacy systems to a system that can enable better collaboration among internal and external stakeholders.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 6 - PROPOSED PROJECT STAFF AND ORGANIZATION

Below you will find a high-level overview of AssetWorks' implementation methodology. For a complete view of the WVDOT's implementation process—including information regarding the project work plan and schedule—please see the **AssetWorks Statement of Work** and **AssetWorks Project Plan,** located in the Appendix of this response.

AssetWorks does NOT outsource its implementations and maintains all professional service staff as regular fulltime employees. We believe this ensures quality and consistency to our customers.

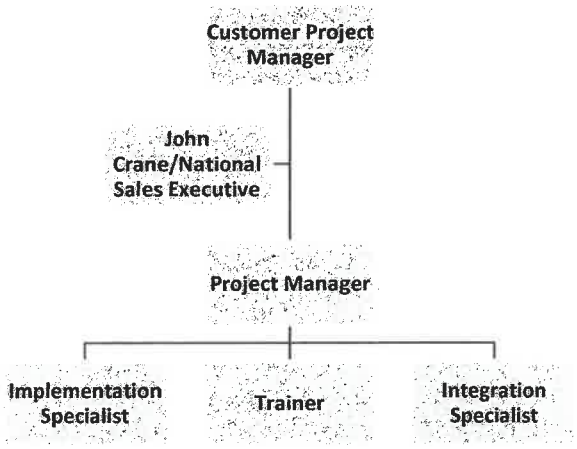
4.3.12.1. PROJECT OVERVIEW

The Implementation Team

Key members of the customer implementation team include: the Project Manager, Trainer(s), Implementation Specialist and an Integration Specialist to complete any data conversion, modification and interface programming in the specified time frame. In addition, the Director of Professional Services will provide management oversight and support as needed to the project team.

The AssetWorks Project Manager is the principal client contact and has ultimate responsibility for the successful completion of the project. The Project Manager is responsible for directing the day-to-day activities of the project. The Project Manager will also monitor the project resources to ensure quality delivery of services, provide bi-weekly status reports, and initiate regular project team conference calls to ensure that the team is making sufficient progress toward the end objectives. The Project Manager is the client's first escalation point for any issues arising during the project.

The following chart illustrates the organizational structure of the team:



Depending on the project, organizational roles may change. Some projects require individuals to assume multiple responsibilities. A team of experienced implementation professionals from AssetWorks will guide you through the implementation process, from pre-implementation planning to post-production operations.

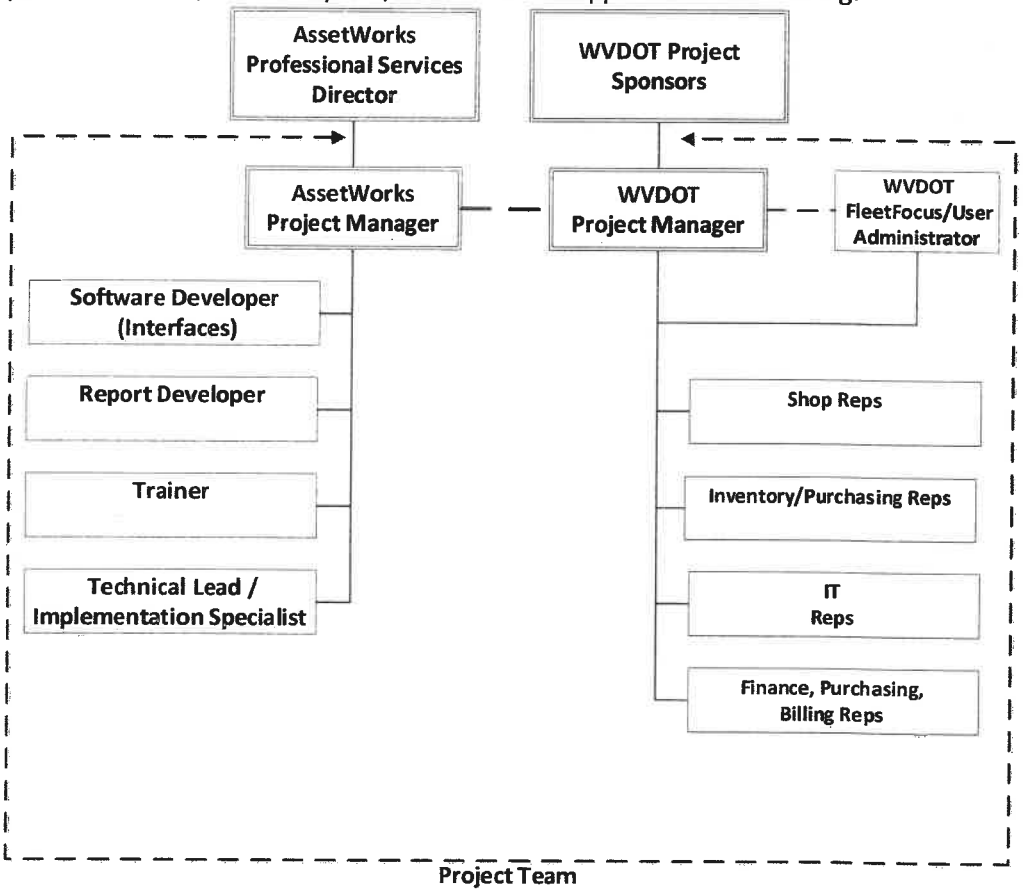
© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

AssetWorks has many skilled FleetFocus consultants in our Professional Services group who are dedicated to providing installation, implementation, and training services. We have provided resumes for staff that may be committed to your implementation project.

AssetWorks Professional Services' project management methodology makes us unique in the industry. Our sophisticated end to end project management methodology is comprised of a robust set of implementation methodologies providing the best solution approach based on products, project scope and the complexity of the proposed project.

Project Staffing

Below please find a proposed project order chart. AssetWorks will assign a Project Manager, who will work with the WVDOT project manager and technical staff to guide the WVDOT through a successful implementation. In addition, AssetWorks will provide the necessary technical resources to complete all aspects of the project. This will include consulting and technical implementation staff to facilitate interface and data migration design, development staff to facilitate the development of system interfaces, custom reports, and trainer to support end user training.



Please see representative AssetWorks LLC resumes in the Appendix of this response.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

4.3.12.2. PERSONNEL SUMMARY TABLE

Those listed below are representative of our experienced staff. Actual project team assigned at time of contract.

Proposed Role	Consultant Name	Experience Summary
Charlene Kiss, PMP	Project Director	Charlene Kiss is a PMP© certified project management professional with more than 16 years of experience leading large and small projects that support business- and operations-oriented software technology and database integration solutions. She specializes in project management, supporting the definition, development, and delivery of complex software solutions that range in size and scope from several hundred thousand to tens of millions of dollars in delivered project value. Ms. Kiss works with both public and private sector customers to implement the AssetWorks FleetFocus solution.
Gary Frost	Senior Project Manager	Gary Frost has over 20 years of experience in software development, management, and training on behalf of AssetWorks. His range of project experience includes data conversion from legacy systems, Oracle and MS SQL Server database installations and post-implementation consulting. He provides consultation services for best business practices and develops timeline requirements and customized training documentation. Mr. Frost designs, develops, and implements third-party software interfaces, custom reports, and applications using Oracle, Excel, Access, and MS SQL Server.
Susie Wade	Senior Project Manager-Implementation Specialist	Susie Wade has been a valued member of the AssetWorks Professional Services team for over 20 years, specializing in project management and implementation of our FleetFocus solution. Her expertise includes project scheduling, resource assignment, budget tracking, and reporting. She also acts as a product consultant, providing training, business process, and documentation services for many of our customers.
Renee Lura, PMP	Senior Project Manager	Fifteen plus years leading and mentoring in organizational strategic planning and development. Certified Project Manager with twenty-two years technology and business development

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 7- VENDOR'S PROPOSED PLAN FOR PROVIDING SERVICES

Please see Statement of Work and Project Plan included with this Response

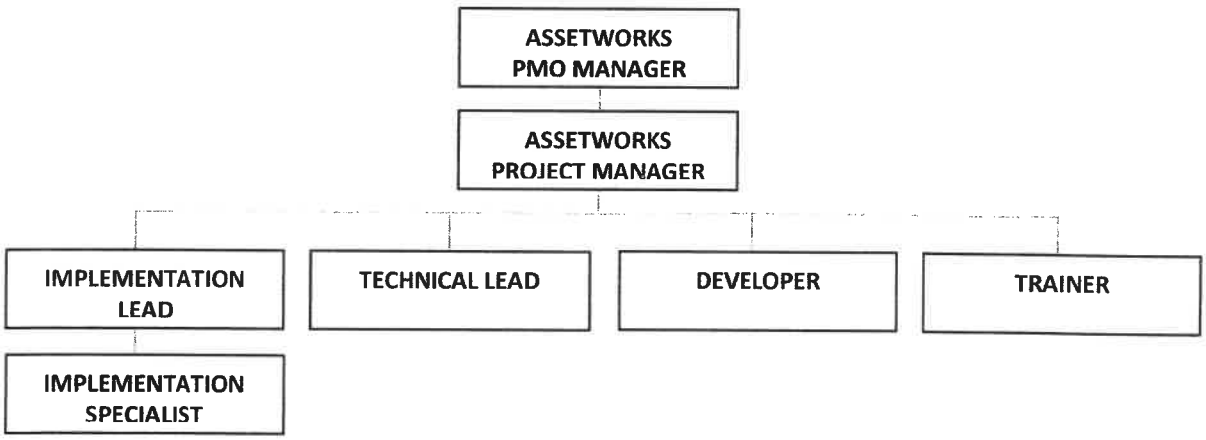
AssetWorks Team Assignments

To ensure the quality and success of the WVDOT's implementation, AssetWorks will not outsource any of its professional services tasks to subcontractors during the course of this project.

Before project kick-off, AssetWorks assigns a dedicated and experienced project manager, who will remain with the project for the duration of the implementation. The AssetWorks Project Manager is responsible for coordinating all AssetWorks-assigned project activities, providing subject matter expertise, monitoring the project resources and budget, and ensuring quality delivery of services. The project manager is the WVDOT's first escalation point for any issues that may arise during the project. The project would also be assigned the following staff:

Implementation Lead – Acts as the primary resource for all major setup and configuration tasks, including the Requirements Review and Workflow Definition, Setup, Data Migration, Application Configuration, Integration Design, User and Security Configuration, and Functional Testing.
Implementation Specialist – Assists the Implementation Lead and provides support for the above-named task areas.
Technical Lead – Works with the implementation team to define integration and custom reports and provides oversight into the development effort for interfaces to third-party systems and custom reports.
Developer – Responsible for developing interfaces and/or custom reports.
Training – Facilitates the completion of training materials and the Train-the-Trainer learning sessions.

A typical AssetWorks FleetFocus Project team includes:



AssetWorks Team Location & Availability

Team Location

All of AssetWorks' Professional Service (PS) team members are based remotely around North America to maintain the highest level of flexibility during product implementations. This would be a benefit to the WVDOT as AssetWorks would be able to bring in the most qualified PS staff by specialization rather than by location.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Team Workload & Availability

AssetWorks uses a forecasting module for all backlog and projected backlog, which includes a one-year view of future contracted and potential work as well as a specific 90-day staff assignment forecast to facilitate and project schedule commitments. AssetWorks currently has several anticipated large projects. These projects include new-system implementations, legacy system migrations, smaller engagements for current customer implementations (i.e. custom report, interface, and enhancement development), system tune-ups, upgrades, and training.

Once an engagement with the WVDOT were contracted, the implementation would be added to the forecast based on the agreed upon timeline and effort. The other active projects would not affect the WVDOT's project timeline. Typically, a full implementation will take from 12 to 18 months from kick-off to production cut-over, depending on the scope of work, the number of user groups included in the implementation, the data migration volume, and the number of interfaces to be developed for existing third-party systems.

Team Communication & Consensus

The WVDOT will have five days to review each provided deliverable and make adjustments, as needed. After five days, the deliverable will be deemed accepted. If changes are requested before the five days, AssetWorks will make the requested revisions, subject to scope, and then submit the final deliverable. There will not be multiple review cycles, unless otherwise mutually agreed.

AssetWorks anticipates no delays in the WVDOT's implementation. Should circumstances necessitate changes to the tasks and/or time estimates, AssetWorks and the WVDOT will discuss these changes in good faith at their earliest opportunity to come to a mutually beneficial agreement.

Data Conversion

AssetWorks will work with the WVDOT to determine the necessary data required to make the system operational (e.g. asset data, current assignments and locations, etc.) and then identify, in conjunction with WVDOT staff, what data will be available from current systems and what data the WVDOT may have to develop or enter. Once the data conversion specifications are complete, AssetWorks will collaborate with WVDOT staff to populate AssetWorks FleetFocus with the approved WVDOT data. AssetWorks anticipates working with WVDOT staff to load the asset information for the WVDOT departments included in the new system implementation effort. AssetWorks further assumes that this will include the WVDOT's asset data inventories for the participating WVDOT departments.

AssetWorks will work with the WVDOT to facilitate formatting the data for electronic loading. AssetWorks will guide WVDOT staff is supplying data to be loaded in a tabular Microsoft XML spreadsheet, which will be used for loading the reconciled asset and configuration information into the AssetWorks database as part of a batch loading process. AssetWorks will provide guidance to the WVDOT on the population of the loading template in advance of the conversion of those data elements. This will include both the legacy asset data as well as data developed to support system setup and configuration.

Third-Party Integration

AssetWorks' standard procedures for developing interface design specifications include the following:

- Create a preliminary specification/interface design plan, including data mapping and interface rules and testing scenarios
- Project team reviews the preliminary specification/interface design plan
- AssetWorks reworks the specification/interface design plan as required

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

- Project team provides final approval of the specification/interface design plan

AssetWorks will work with the WVDOT to define and prioritize any requested third-party interfaces. Based on the results of this effort, AssetWorks and the WVDOT will determine the timing for the inclusion of the priority interfaces in the final scope of the implementation effort. The interfaces identified as either important or to be explored are included in the Statement of Work.

Training & Documentation

The AssetWorks project team will develop and deliver a training program to provide AssetWorks FleetFocus training for various types of WVDOT users. Typically, AssetWorks offers a Train-the-Trainer approach, which focuses on training the key users/trainers within the WVDOT, who in turn prepare the pool of all users for use of the system. The training session is designed to be conducted in a classroom-style setting on site in the WVDOT. The training will be role-based and will differ for trainees from the various organizational and functional areas. Each WVDOT trainee will have the basic skills in the overall use of AssetWorks FleetFocus and strong knowledge of how to use the application in his or her specific job function or area of expertise.

After the initial training, the WVDOT's key users/trainers will provide all subsequent user training required in connection with new members entering the user community and on an ongoing basis. Any training materials, including presentation materials, will be delivered as electronic media in Microsoft Word or Microsoft PowerPoint format.

Training Materials

Once the WVDOT approves the Training Plan, the AssetWorks project team will provide our training materials based on the expressed needs of the WVDOT. These materials are designed to be for a generalized, role-based user and will be provided to the WVDOT in both PDF and Microsoft PowerPoint formats. Once the training sessions are complete, the WVDOT will retain the training materials and will be free to edit, update, and repurpose them for internal WVDOT use. AssetWorks training materials assume all users are familiar with a Windows environment. The AssetWorks training will not include any Windows or remedial computer training.

Train-the-Trainer Training

AssetWorks will provide operational training to the WVDOT trainers. The topics and workflows included in the training will be those finalized by the WVDOT team depending on the extent of the Business Process Analysis contracted. The WVDOT should remain especially sensitive to necessary, last-minute procedural changes or clarifications based on end-user feedback.

The WVDOT will identify at least one "key user" at each group to closely support the cut-over, particularly after the training concludes. These individuals will be responsible for answering initial end user questions and, most importantly, implementing subsequent changes or alterations to the documented procedures. AssetWorks recommends that these "key users" be those that attended the trainer training sessions described above.

User Training

In addition to training the WVDOT's key users to act as trainer for new users in the future, AssetWorks will also provide training to the end users for each phase of the system implementation. This would include role-based training workshops to prepare the individual users to use the system in accordance with their defined user role. In some instances, training materials may be unique not only to user roles

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

but also to the users in the various participating departments, asset management, and maintenance groups. The training sessions and materials will be developed around those identified above.

Administrator Training

The planning and materials development for the System Administrator training will be similar to that described above for the Train-the-Trainer training. AssetWorks will provide training for key system administration users, assuming the WVDOT's training facility has a sufficient number of workstations for this training. These trainees will be responsible for supporting the AssetWorks FleetFocus application from a technical or "back office" perspective. The training will cover the following areas of AssetWorks FleetFocus:

- Application logging and troubleshooting
- Report and dashboard development
- Application installation and upgrades
- Users and user groups
- Set-up options
- Configuration management
- MAXQueue configuration and management
- Mobile device hardware and software
- System and user interface configuration
- Interface troubleshooting
- Batch processing
- Table management
- Data loading and validation
- Notification configuration

Testing Approach

AssetWorks will prepare a System Test Plan to ensure the system configuration meets the design outlined in the Requirements Validation Report. The System Test Plan will consist of the functional and data validation tests consistent with the standard workflows and required functions that would be defined during the requirement and configuration activities.

AssetWorks will coordinate with the WVDOT to prepare test data to facilitate the execution of the test scripts and to display the converted data in the test environment, according to the System Test Plan. This test plan will be executed according to the schedule in the project plan. Prior to the execution of the test plan and script, AssetWorks will work with the WVDOT to provide training and guidance on using the system to facilitate the execution of the testing scenarios. Additionally, AssetWorks will provide guidance on future test scripts and assistance in understanding the software tools.

Cut-Over Preparation and Execution

AssetWorks will work with the WVDOT to stage and prepare for the system roll out/cut over. This includes final site testing of hardware as well as system readiness and review of procedures with user personnel. When the WVDOT commences live operations using AssetWorks FleetFocus, AssetWorks will be on site to provide Go-Live assistance for the WVDOT's maintenance operations. This step is critical to success. The AssetWorks and WVDOT team will provide refresher training and help to technicians, supervisors, inventory personnel, and back office functions to make the transition as smooth as possible. This on-site support can include data imports, report development, and hands-on help for the users, depending on the needs identified by the WVDOT.

Please see the Statement of Work for project documentation and acceptance criteria.

AssetWorks provides full system documentation for the use of the FleetFocus system. All documentation is provided electronically and may be duplicated as needed by the customer. The documentation is broken out by functional area as follows:

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

System Administration - Addresses all areas related to the set-up, control and ongoing maintenance of the system. The guide is intended for the individual responsible for the functional administration of the system.

Technical Administration - Addresses all areas related to the technical administration of the system. Items such as starting detached processes and optimization of the database are addressed in this manual.

Work Shop Management - This end-user manual addresses work requests, work orders, processing labor and commercial charges, preventive maintenance scheduling as well as other miscellaneous workshop functions.

Inventory Management - This end user manual provides instruction relating to parts inventory, materials management and the purchasing function of the system

Asset Management - This manual addresses all areas relating to the vehicle master record, warranty tracking, motor pool control, accounting functions including billing, and other miscellaneous areas of asset management.

Reports Manual - This manual provides instruction to the standard reports of the system as well as the ad-hoc reporting features of the system.

Fuel Management - This manual addresses all areas relating to fuel inventory ordering and dispensing.

In addition, AssetWorks provides the following reference manuals:

- Entity Relationship Diagram

AssetWorks will also provide documentation for all customization and interfaces.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 8 - RESPONSES TO STATE'S GOALS AND OBJECTIVES

4.2.1.1. Vendor's proposal should provide an architectural design based on the capacity and storage requirements listing in this RFP. The proposal should include a description of the methodology that will be utilized to size, plan, and execute the implementation of a turnkey solution.
The actual design and capacity details can be found in the System Requirements and Compatibility document in the Appendix of this response. Tabs 6 & 7 offer and overview of the Implementation Plan. Full details of the implementation and project plan can be found in the Statement of Work in the Appendix of this response.

4.2.1.2. Vendor's proposal should outline all software and hardware components required to meet the mandatory requirements. The proposal should identify any features/functionality that exceed the mandatory requirements. The proposal must contain technical documentation on each component in the proposed solution. This documentation will allow for a comprehensive evaluation.
The proposed AssetWorks FleetFocus solution is a fully integrated, modular solution capable of managing an unlimited number of assets and users delivered in a web-based platform. Specific module details are described under Tab 4.

Serving over 28 states, 500 city, county, and 9 out the top 10 largest cities in North America, AssetWorks is an extensively scalable web-based enterprise fleet and asset management solution serving all aspects of city, county, and state government organizations. Below is just a sample of the supported functionality.

- Asset Management
- Work Order Management
- Fuel Management System integration
- Unlimited users and shop locations
- Vendor Management
- Telematics (driver behavior, DTC's, meter reads)
- FuelFocus (integrated fuel management system)
- Motor Pool Management with KeyValet (Optional automated motor pool reservation solution)
- Driver Service Requests
- Reporting (Crystal, ad-Hoc, dashboards, >300 OOB reports, etc.)
- Capital Planning
- Asset performance assessment
- Unlimited asset hierarchy
- Allocation and Assignment (Quartermaster)
- Billing Module (with optional integration to financial system)
- Warranty management
- Shop Planning
- Inventory management (fully integrated includes Parts Serialization)
- KPIs / Dashboards
- Smartphone (Android and IoTs) applications
- Employee tracking (testing, certifications, etc.)

Work Order Management
AssetWorks FleetFocus is delivered with a
comprehensive Work Order Management module supporting all aspects of asset maintenance operations, including workshop operations and vendor maintenance. This module includes nested

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

maintenance and service schedules, job standards, work requests, repair and service campaigns, warranty flagging and repair tracking, outside repair management, and workshop labor capture. Custom workflows can be structured to support various fleet operations, and work order formats can be customized to collect data relevant to the operation, type of repair, and workshop.

Work instructions can be generated from service requests or on demand. They can also be generated from preventive maintenance schedules, as described in the next section. Each instruction can be associated to individual assets, enabling work to be tracked at any level against the structure or its hierarchy and components.

AssetWorks FleetFocus includes an optional MobileFocus module that provides connected and disconnected on-site operations to record work completions in real time. MobileFocus also provides functionality to perform inspections, record conditions, take photos, and generate new work requests. If the connection is lost, users can continue working offline. When connection is restored, MobileFocus automatically uploads and downloads queued transactions accordingly.

Workflows and notifications can be configured so that emails are issued to the asset supervisor when an urgent work order is generated. Authorizations can be programmed so that work orders can be reviewed and authorized before identified as complete.

Check the real-time status of ongoing work, adjust the shop calendar, view services due for PM, make labor corrections, manage service requests, and review/close work orders. The **Work Management Portal** is customizable based on your fleet's individualized needs.

Work orders can be grouped into multi-asset work orders, enabling work to be efficiently scheduled and assigned to crews, individuals, or external contractors. Personalized portals enable a supervisor or technician to view key information specific to their position and then navigate to relevant sections of the order. The screenshot below shows a work order with a task. Additional tasks can be added, as required. Action buttons are highlighted, which then prompt the user to complete specific actions:

AssetWorks **Capital Planning** module allows for the creation, management, and editing of any number of plans/scenarios with varying budgets, funding sources, underlying projects, timelines, goals, associated work orders, and more. Any work orders associated to a Capital Plan budget can track real time spending against the overall budget and funding sources as work is completed.

Inventory Management Module

FleetFocus includes complete enterprise inventory management capabilities. Standard functionality includes unlimited inventory locations, purchasing, requisitioning, RFP/Q/B responses, inventory counts (e.g. ABC codes, random, cycle, etc.), stock promotion, not from inventory items, FIFO/LIFO, min/max, EOQ, part requests, transfers, purchase/issue factors, binning, serialization, cross references, and much more. Work management and material management portals are tightly integrated, so in the event a technician requests a part, that request is automatically routed to the materials manager. When the request is fulfilled, technicians are automatically informed their items are ready for pickup. When parts fall below their reorder point, users are notified in real-time. In addition, FleetFocus' replenishment feature monitors inventory and will automatically generate purchase orders on a user-defined frequency and email them to the preferred vendors. As warranties (e.g. OEM, component, parts, and tasks) are triggered, technicians are informed and warranty claims are automatically generated and routed to a central processing location.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

FleetFocus's serialization functionality allows equipment/parts to be treated as both part and asset. For example, a pump may be installed as a part to a pump house, but at some point removed, placed back into inventory (with a defective status), and replaced with another pump. The removed pump is then repaired as an asset and placed back into inventory (with a functional status) and then reinstalled as a part into a different pump house. That pump's complete assignment history (as an issued part to a pump house) and repair history (as an asset) is readily available to technicians as well as who requested the pump, who removed/installed it, when, all work/comments with the associated work, and under what authority. All failures, costs, comments, assignments, utilization, downtime, and delays are recorded for the complete life cycle of each asset and that data is then used to recommend maintenance standards, replacement candidates, and plan for maintenance related costs.

Asset Management Module
AssetWorks FleetFocus enables administrators to define any number of asset categories, including point, linear, mobile, and boundary assets. Structures can therefore be modeled as point or linear items and can be located both spatially and along a road network.

Asset categories can also be created with hierarchical parent/child relationships, enabling each individual structure hierarchy to be modeled in the system accordingly.

AssetWorks FleetFocus provides full life-cycle costing and management against each structure and its various levels of hierarchy. Functionality, referred to as serialized components, enables components of the structure to be tracked through initial fabrication, rebuilds, and re-installation.
Example: if a component of the structure is replaced and refurbished, AssetWorks FleetFocus will track that component, including any previous structure that the component might have been installed against.

Any number of attachments can be associated to each asset, such as documents, photos, and videos. These attachments enable special access instructions, condition photos, build drawings, or other required electronic documents to be associated to the asset.

The Asset Management Portal allows users to create new assets, view asset counts and metrics, create asset filters, and view those assets on the map.

Parts and Materials Inventory
The Parts and Materials Inventory module includes (but is not limited to):

- Replenishment management: min/max tracking
- Replenishment Management – Min/Max Tracking
- transfers among warehouses
- inventory counts
- requisition and purchase order management
- vendor and vendor contract management
- notification of asset warranty expiration

Users can describe parts/materials attributes as well as cross-reference parts/materials information. The physical inventory capability operates in conjunction with tracking and accounting for all parts/materials issued, receipts, and transfers, including a cyclical count capability. Users receive notification of parts/materials warranty failure, parts/materials estimated life failure, and time and usage criteria.

© 2021 AssetWorks, LLC | All Rights Reserved. www.assetworks.com

Bar coding is a fully-integrated module of the system, which provides automated features for inventory management such as parts/materials issues, receipts, transfers, and physical inventory processing.

Fleet and Fuel Management
AssetWorks FleetFocus is the *only* asset management solution on the market today delivered with a fully-integrated and functionally-comprehensive fleet maintenance management solution.

The fleet functionality and fleet-specific modules of the system can be configured so as to maintain separation between departments, if desired. AssetWorks FleetFocus is also delivered with out-of-the-box fuel management integration capabilities.

Optionally, we have a real-time, fully-integrated fuel management system; FuelFocus.

4.2.1.3. Vendor should describe the process for deploying the components outlined in the proposal and should address a recommended approach for the migration of existing data and services.
AssetWorks has implemented our proposed solution over 500 times without a single failure. We have significant experience in converting legacy data and provide a full roadmap for the conversion. Please see Statement of Work in the Appendix of this response.

4.2.1.4. Vendor should describe the VPS technical support and maintenance needs along with their staff capability to support them and include a detailed plan for hardware/software support and knowledge transfer, installation, ongoing support, and training.
Located in the Appendix of this response, please see the Statement of Work for our training plan and the System Requirements and Compatibility document for information on hardware need.

4.2.1.5. The proposed solution should be compatible with the State of West Virginia software standards and security policies. The solution should be compatible with Google Workspace products (the State is currently transitioning from Microsoft Office to Google Workspace) and the State of West Virginia's acceptable use policy. These policies are located at: https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx.
AssetWorks can comply with the Acceptable Use Policy and has described potential integrations within the Statement of Work.

4.2.1.6. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Fleet Equipment Scheduled Maintenance process as follows:

- **Facilitate the configuration of Preventive Maintenance criteria, which will trigger preventive maintenance activities and notify owners about preventive maintenance due activities for equipment and vehicles.**
- **Facilitate in-house repair orders and work reporting in the system.**
- **Keep all preventive maintenance repair history updated.**
- **Record and track commercial preventive maintenance repairs performed by a third party through either entry of the work performed into the system or importing of information provided by the third party who performed the work.**
- **Facilitate the management of specific, hierarchal preventive maintenance scheduling.**

AssetWorks complies with all of the above. Additionally, AssetWorks FleetFocus is delivered with our patented Forecaster system allows the user to create an unlimited number of recurring or forecasted jobs (PM's, inspections, and so on) to be performed against a piece or a class of equipment. The standard job system enables the user to create work schedules as well as indicate the labor and material

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

needed to complete the job. The Forecaster generates work requests with calculated due dates from standard job information. The forecast function bases its date calculation on the vehicle's meter, fuel consumed, or a time interval. The forecast will use the earliest of these intervals to establish a due date of when a job should be done next. For jobs defined as cascading, the parent job resets all child jobs when completed.

4.2.1.7. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Equipment Repair business process as follows:

- **Facilitate in-house repair orders and work reporting in the system.**
- **Support importing of commercial repair data for work performed by a third party.**
- **Keep all repair history up to date.**

AssetWorks complies with all of the above and can confirm FleetFocus as the solution of choice to 80% of the Government Fleet/APWA Award, NAFA Fleet Awards, and 100 Best Fleets winners. We believe our solution played a key role in the success of our customers to achieve their goals and receiving the recognition so richly deserved.

4.2.1.8. Vendor's proposed solution should support WVDOT in achieving operational excellence in terms of the Fueling process as follows:

- **Accurately track the fuel usage and cost history of all State-owned equipment and vehicles by vehicle.**
- **Track all types of fueling transactions including automated bulk fueling transactions (currently tracked using the Fuel Master system), commercial fuel cards, and manual fueling transactions. Provide for the billing of fuel issues to other State Agencies.**

AssetWorks can comply with all of the above by the use of our Fuel Management module included with this response. The Fuel Management Module includes fuel ordering, receiving, automatic calculation of inventory balances, product transfers among tanks, tank stick readings, totalizer readings, tank balance reconciliation, manual fuel issues, and commercial fuel tracking. With the optional fuel interface, the module will link to popular automated fuel dispensing systems to capture fuel issues electronically.

AssetWorks is the only EAM vendor to offer its own integrated fuel management system, **FuelFocus**. FuelFocus shares the same database as FleetFocus so data never becomes out of synch. Additionally, FuelFocus uses advanced wireless technology where vehicle number and odometer reading are automatically downloaded to the database in real-time. Fuel dispensed is also automatically collected and updated online. With the optional FMS fuel island hardware, automated fuel dispensing becomes a fully integrated module of the FleetFocus. FuelFocus with RF technology has been a popular option for both our state government and local government customers.

Commercial fuel is also maintained by the system. Commercial fuel charges can be manually input into the FleetFocus system or can be imported using standard system interfaces. AssetWorks provides standard interfaces to Wright Express, Voyager, Western Energetic and Shell fuel card vendors. AssetWorks can also provide services to develop interfaces to any other fuel vendors. The standard interface validates all data and generates error reports for any rejected records. Another feature allows customers to import transactions other than fuel and oil. Service work, such as oil changes can be imported and will reset the preventive maintenance schedule.

4.2.1.9. Vendor's proposed solution should support WVDOT in managing the full asset lifecycle and in prioritizing assets for replacement as follows:

- **Support managing of fleet and equipment cost allocation and in conjunction with wvOASIS support billing for equipment usage.**

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

- **Plan for retirement/replacement of equipment and the acquisition of equipment.**
- **Manage asset ownership assignments and transfers during the lifecycle of the assets.**
- **Manage disposal/retirement of equipment in conjunction with the wvOASIS fixed assets module.**

AssetWorks can be configured to comply with above and information on the wvOASIS integration can be found in the Statement of Work. FleetFocus is designed to aid the fleet manager in determining which units should be scheduled for replacement and then in developing a replacement plan. This plan selects and prioritizes equipment based on a variety of characteristics, and on the availability of replacement funds. The goal is to replace units that will result in the best investment through reduced operating costs and downtime. The Replacement model can feed the budget and acquisition process for a fully automated replacement cycle. Unit Acquisition and Disposal maintains unit budget, acquisition, and disposal information. The module tracks units from budget request, through the acquisition process, and eventually through disposal. The module creates purchase orders for new unit acquisitions; tracks delivery schedules, receives new units into inventory, and prepares the new unit for service. When a unit is ready for disposal, it can be identified and flagged, prepared for disposal, and the final sale proceeds will be recorded.

Optionally, the CAM application can be deployed. Please see page 27 of this document for more information about this unique valued added feature.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

HOSTING

AssetWorks has over 20 years' experience managing the hardware, operating system, database management system and application environments required for the development, testing, training, and production support of its client server and web-based applications. This experience has been built over the years through 24x7 customer service and Information Technology back-office support for our hosted services customers. In 1997, AssetWorks, with its solution FleetFocus, became the first in the Fleet Enterprise Asset Management (EAM) industry to offer hosting services as an Application Service Provider (ASP) to our valued client-partners. AssetWorks provides hosting services for our entire suite of Enterprise Asset Management ('EAM') applications including FleetFocus, FuelFocus, CAM, EAM, FSS (Field Services Solutions), Integrated Workplace Management and Fixed Asset Management. As testament to over a decade of service, AssetWorks can claim both private and public sector organizations as satisfied customers including a number of agencies within the federal government.

Benefits of Hosted Services

- Eliminates the initial outlay of capital for hardware, database, and operating system software
- Improves the level of application support AssetWorks can provide in support of your implementation
- Minimizes the cost to train and retain highly skilled technical staff
- Removes the responsibility for ongoing application support and maintenance from your IT staff
- Allows you to budget for a predictable cash flow for IT expenditures

AssetWorks employs database and IT infrastructure subject matter experts who manage our server and network infrastructure and provide performance monitoring and tuning services for the application and database servers, as well as for the network and communications infrastructure.

Moreover, our team supports these enterprise systems using "best practices" ***system management controls*** for critical aspects of IT support such as capacity management, change management, performance management, and problem management. ***Security*** for our customers and their data is also of paramount importance to us. We have established extensive policies and methodologies for system security including, but not limited to, restricted physical access to all hardware; multiple sets of firewalls; proxies, authenticated VPN sessions, and active change control processes.

AssetWorks has proven expertise in providing strategy and execution of single and multiple server environments based on our extensive IT experience. Our Data Center staff manages multiple upgrade, development, and production environments for more than 145 diverse organizations, including both small and large enterprise customers. Our hosting experience extends from small local governments with fewer than 300 vehicle equipment units to enterprise-wide implementations with more than 75,000 vehicles and 1,500 users.

AssetWorks has garnered this high level of trust from our customers because of both our experience and professionalism and our comprehensive Security Management and Disaster Recovery Plan. Since September 2006, and with annual renewals since then, the AssetWorks Data Center in eastern Pennsylvania maintains SSAE18-SOC 2 certification status by the independent auditing firm of Lurie LLP. The SSAE18-SOC 2 is an auditing standard designed to enable an independent auditor to evaluate and issue an opinion on a service organization's controls. The audit report (i.e. the service auditor's report) contains the auditor's opinion, a description of the controls placed in operation, and description of the auditor's tests of operating effectiveness. In the case of the AssetWorks Data Center, the organizational controls, application development and maintenance controls, logical security and access controls, data processing



© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

controls and business continuity controls all were designated as meeting or exceeding standards. The standards are those set forth by the Information Systems Audit and Control Association (ISACA) and approved by the Public Company Accounting Oversight Board (PCAOB).

Additionally, the AssetWorks Data Center, and specifically the controls exhibited and enforced on the ASP (Application Service Provider) environment, has been granted the designation "Authorized to Operate" (ATO) as a system housing CUI (Controlled Unclassified Information) data at our facility based on the DOJ assessment using NIST 800-53 guidelines for FISMA (Federal Information Standards Management Agency) standards. This independent audit and subsequent designation was conducted by the Department of Justice (DOJ) at the request of the Department of Homeland Security (DHS), a current AssetWorks ASP customer.
These certifications ensure that **AssetWorks has in place all policies and procedures to make your data safe**. We operate our Data Center in the highest standards demanded by our customers including:

- **The AssetWorks Data Center is designated a Tier 3 facility as defined by the Uptime Institute and provides operational and environmental redundancy:**
  - 2N power distribution systems provide diversified power
  - High level of security through mantrap with dual factor, biometric access control and closed circuit video surveillance
  - Carrier-neutral facility with I3 on-premises carriers
  - Managed dark fiber, high-speed fiber optic network within facility provides access to service provider secure WAN
  - Custom built mass air units condition data centers with green energy technologies
- **Cloud back-up storage redundancy**
- **Security monitoring**
- **Tiered firewalls and data encryption**
- **Dedicated hardware and networks**
- **Data back ups retained for 90 days standard**
- **Disaster Recovery Plan in place**

AssetWorks has developed Service Level Agreements specific to the hosting of application suites. Each Service Level Agreement starts with a baseline agreement that is tailored to meet the unique needs and requirements of each customer. To help customers evaluate the service level actually provided, AssetWorks provides regular benchmarks and metrics to its hosted customers regarding application and network performance. As part of the standard hosting services provided, AssetWorks will maintain the database and application servers, as well as the network infrastructure required for operation and connectivity to the Internet (or customer Intranet, as an option). AssetWorks will provide the server operating system and RDBMS licenses, including maintenance for those systems, and required back-office maintenance and support of server hardware, including database back-ups (including cloud storage) and disaster preparedness tasks (including recovery training and testing).

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TECHNICAL SUPPORT & MAINTENANCE:

The following services are available to all customers current on maintenance:
The AssetWorks Support Center is staffed by regular, fulltime employees of AssetWorks. Access to the Support Center is not limited or 'tiered' and all customers have unlimited access to both technical and application support personnel. AssetWorks does NOT outsource its support.

Post Implementation Support
Telephone Support
AssetWorks provides customer support service center fully staffed from 5:00 AM PST to 5:30 PM PST Monday through Friday. When a call is placed to the Client Services group, a representative will receive and own the ticket for the life of the item. The main office supporting the AssetWorks FASuite product line is:

AssetWorks LLC
16201 East Indiana, Suite 2900
Spokane Valley, WA 99216
Tel: 1-800-900-8152 (Support Center)

Weekend and After Hours
Weekend and after-hours calls will be routed to an answering service and then on to the Client Services staff. The "on-call" representative will respond to priority 1 (down system) items during these hours. AssetWorks uses its online interactive problem management system to log and track all customer-reported support requests.

AssetWorks offers four levels of response to all customers seeking support.
Level-0 Support
This is where your call is first handled. Our friendly and committed staff of support coordinators will record your request using our call tracking software. Your call will then be routed to the appropriate support staff member.
Level-1 Support
This is the service provided for initial support requests. Our Level-1 Client Service Specialists (CSSs) provide problem determination assistance, analysis and resolution, as well as preventive and corrective service information.
Level-2 Support
This is engaged by Level-1 for in depth analysis of complex problems. Our Level-2 CSSs are trained to analyze, troubleshoot, and reproduce errors, and solve complex technical issues.
Level-3 Development
This is engaged if a problem is identified in AssetWorks product code, or if there is a request for new functionality that is not in the existing product. Level-3 Development Engineers are responsible for analyzing code problems and developing fixes for complex technical problems.

AssetWorks Priority Levels and Communication Methods
Responses to customer requests and usage questions are prioritized according to priority levels. Your call will be analyzed and prioritized to ensure that the support staff responds according to your individual business requirements.
Priority 1 (Down Production System)
This type of problem is considered the most critical, under any circumstances. These calls are handled immediately and all appropriate Managers and Level 2 resources are notified via phone or pager. Customer

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

contact is maintained until AssetWorks and the customer reach a viable resolution. If a Priority 1 problem takes place outside normal business hours, an "on call" Client Service Specialist is alerted to address the Priority 1 problem after hours. The primary goal is to get the production system back on-line as soon as possible.

Priority 2 (Critical Business Process Function Unavailable)

A problem is defined as Priority 2 when the software in a production environment is operational with functional limitations or restrictions to key portions of the system.

Priority 3 (Normal Priority)

Priority 3 problems make up 95% of all calls to Customer Support. Priority 3 issues cover topics such as CD requests, general advice, annoyances, non-business critical defects, and "how to" questions.

Priority 4 (Enhancements & Documentation)

Priority 4 issues are addressed if there is a request for new functionality that is not in the existing product. These requests are forwarded to the Product Review Board. Priority 4 issues include documentation errors etc. Such errors are normally corrected in the next maintenance release of the product.

Customer Support Escalations

AssetWorks Customer Support is very committed to achieving high satisfaction ratings from our customers. However, we realize that occasionally our customers have support issues that need to be escalated to AssetWorks Management.

Escalation Path

When should you use the AssetWorks Product Support Escalation Path?

- When a Priority 1 issue is not being addressed immediately
- When difficulties are encountered in obtaining account status
- When standard processes are not satisfactory

Process: Ask the Client Service Specialist handling your ticket to notify a Senior Client Service Representative. The CSS will note the information in the ticket and ask the Senior Representative to follow up. If the Senior Client Services Representative is unable to resolve the issue in a timely fashion, the item will be escalated to the Department Director and then to the Vice President.

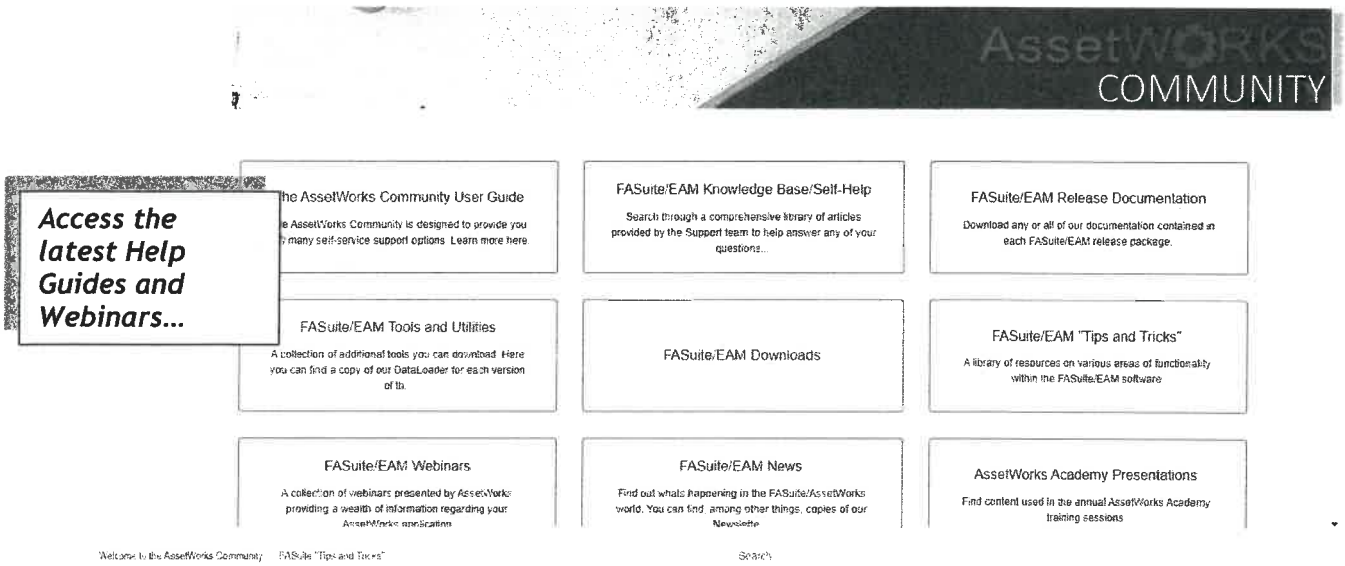
Research & Development Issues:

If a reported incident is determined to be a product defect, the Client Service Specialist (CSS) will escalate the ticket to the appropriate Research and Development Team. The CSS will update the customer regarding the Development and QA process. If a reported incident is determined to be an enhancement request, the CSS will forward the request to the AssetWorks Product Review Board. The Review Board will review submitted business and technical justification, determine an impact assessment, and decide whether to include in future development plans. The CSS will update the customer regarding the solution.

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

Web Site Support

The FleetFocus Support site (https://community.assetworks.com) offers documentation, patches, known issues, ability to enter service requests, enhancement requests, to vote on enhancements, download upgrades and patches, FAQs and a customer list-serve forum.





© 2021 AssetWorks, LLC | All Rights Reserved. www.assetworks.com

AssetWorks Academy:
To benefit our valued client-partners, AssetWorks hosts AssetWorks Academy---an annual, invitation-only event for all current customers. We provide courses and training on all AssetWorks products, including breakout groups and industry round tables where participants can exchange ideas and work toward solutions to shared challenges. We also invite a number of vendor partners to participate and showcase additional products that may be helpful for our customers.

New Releases and Patches:
Because of our diverse customer base, we have developed important reciprocal relationships with our customers that drive how the application is developed and the direction it takes. With that philosophy in mind, AssetWorks has employed a strategy of 'customer-equality'. As the leading provider of enterprise asset management software for both the public and private sectors, AssetWorks is in the enviable position of claiming some of the nation's largest organizations as customers. But as a way to confirm our commitment to *all* of our customers, regardless of size or budget, AssetWorks offers all enhancements and modifications to the base system to all customers. We want all customers to benefit as a group from the development efforts sponsored by others. New enhancements and features made to the base system are optionally available to all customers at the time of release by the use of module flags and application controls. Customers are given the option of utilizing the new feature or not.

Additionally, those enhancements not specifically sponsored by a customer, but deemed to be beneficial to the overall mission of the application, are compiled into a list and voted on by the entire User Community during the respective Annual User Conferences. A selection of those features or enhancements receiving the most votes, are developed "gratis" by AssetWorks and offered as part of the general release. *We believe this strategy offers the best value to our customers and reinforces our commitment to the asset management industry sector.*

There is typically one scheduled major release a year and intermittent 'patch' or fix releases. Customers are always given advance notification of all releases. All customers who are current on maintenance may access the releases and patches. AssetWorks recognizes the hurtles some organizations face when upgrading a production application and are sensitive to keeping upgrades to a minimum and making those upgrades as easy as possible. AssetWorks has developed an InstallShield based upgrade application that automates most of the process. Additionally, because of the web architecture the upgrade need only be applied once to the production environment and does not need to be rolled out to individual user machines. With this approach it is possible that an upgrade can be applied and operationally deployed in less than a half a day.



© 2021 AssetWorks, LLC | All Rights Reserved. www.assetworks.com

TAB 9: CAPABILITIES OF PROPOSED VPS SOLUTION

AssetWorks offers both an on-premises as well as Saas deployment models.

The FleetFocus FA system is comprised of the following components: the Application, the Web Modules, and MAXQueue.

- The Web Modules is a multi-tiered web-application
- MAXQueue is an integration tool that provides interfacing and automation opportunities

The system is supported by a database server, application server and web server.

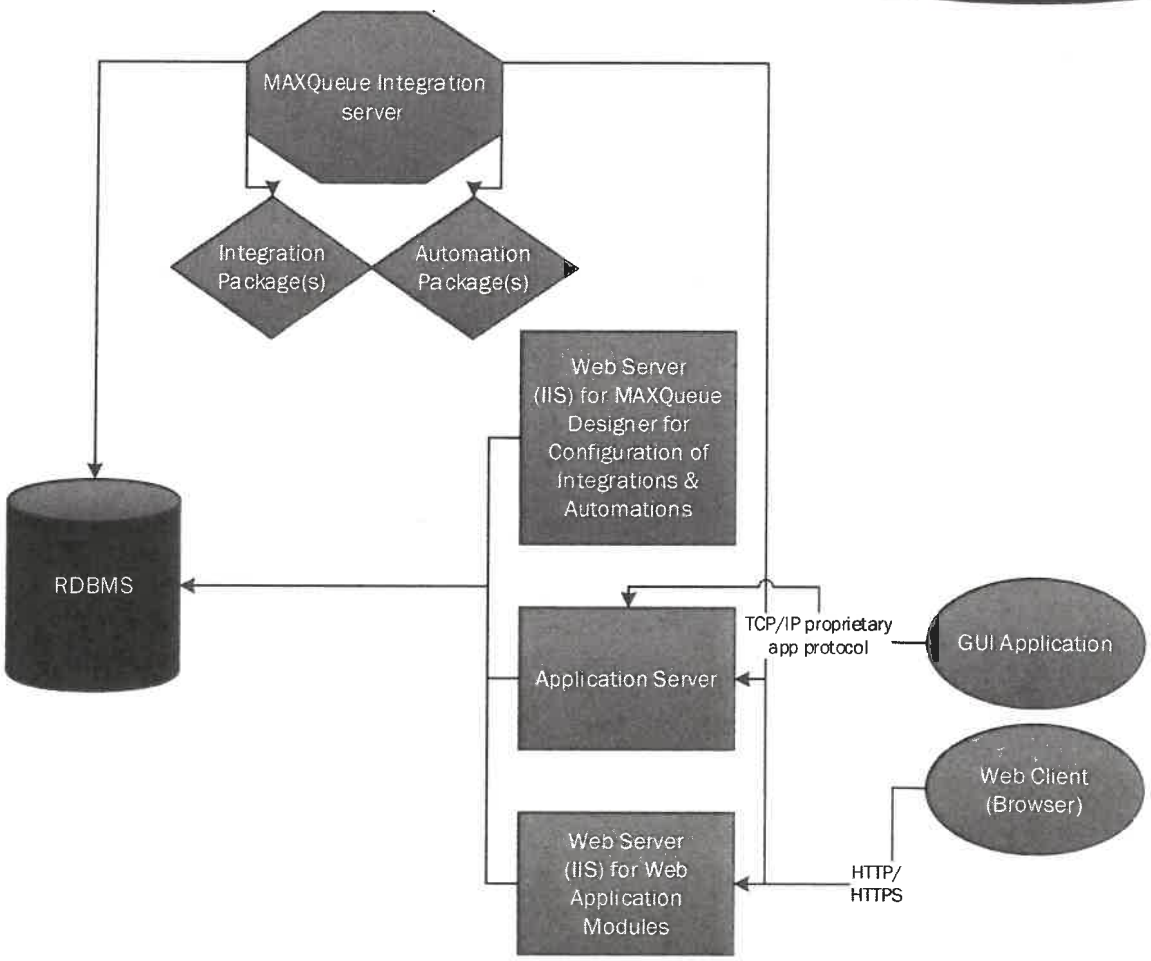
- The database server provides data access and storage which is part of the data access layer.
- The application server acts as part of the business logic layer, which implements the business rules for the product.
- The web server acts as part of the front-end presentation layer, providing a central web interface for your components.

The addition of specific modules allows your organization to improve performance and efficiency of fleet management. Installed modules can be set up to be accessed by everyone in your organization - from mechanics tracking work orders or labor, and managers pulling reports essential for better vehicle and cost management, to external customers wishing to view information and enter incidents or complaints.

On-Premise Model - Technical specifications for the development, testing, training, production and disaster recovery/reporting landscapes required to implement the VPS, with sufficient detail to allow WVDOT and WVOT to estimate the cost of implementation and operation of the environment. Vendor should be prepared to support initial software configuration, development and testing in a Vendor hosted environment to allow sufficient time for the required environment to be established by WVDOT and WVOT. All project activities beginning not later than user acceptance testing shall occur in the State managed on-premise environment.

Please see the System Requirements and Compatibility document in the Appendix of this response. Additionally, the implementation for on-premises is discussed in the Statement of Work

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

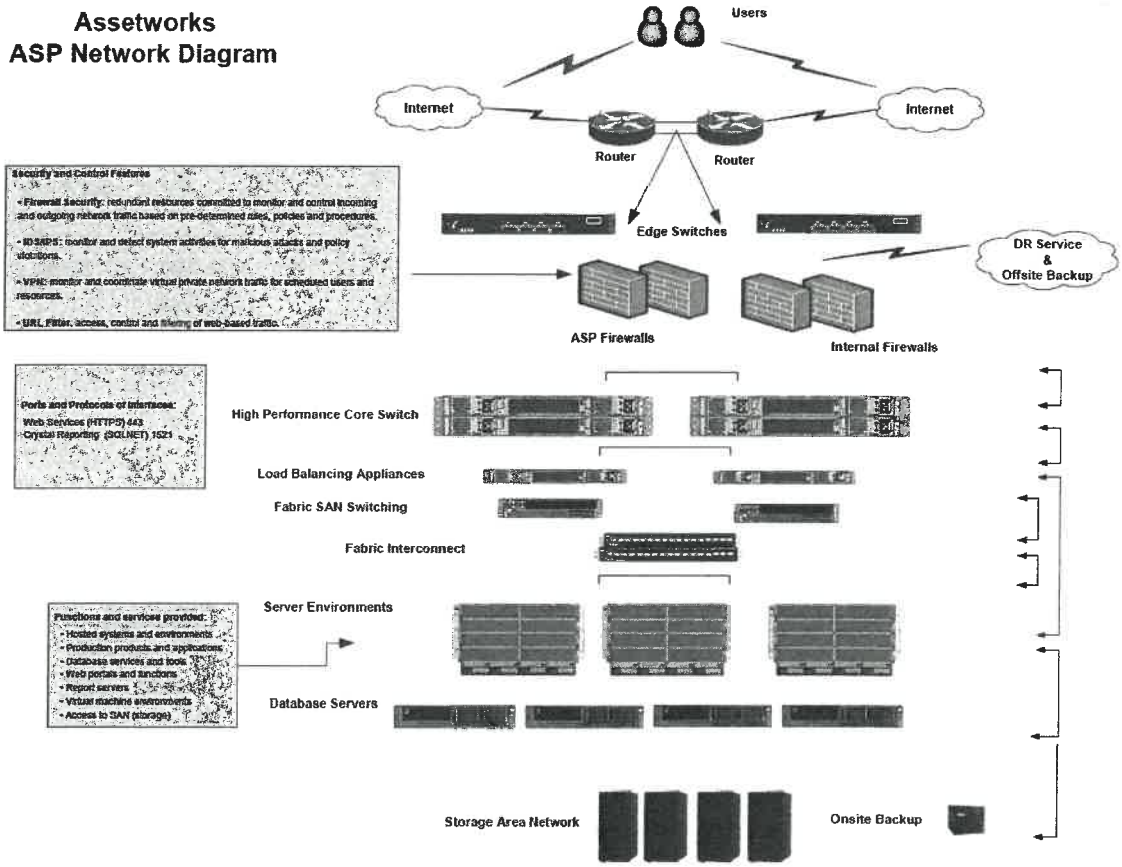


Saas or Cloud Model - Detailed discussion of the technical environment in which the VPS will operate including information on the data centers which will host the development/testing/training, production, and disaster recovery environments. The production and disaster recovery environments shall be hosted in data centers which are geographically distant from each other.

AssetWorks recommends our SaaS model for the security and convenience of the State. AssetWorks operates and maintains its own data center solely for customers of our solutions. Our data center, as well as the DR site and back up sites, are wholly located in the US with no State data leaving the US.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Assetworks
ASP Network Diagram



This document is proprietary and confidential.
No part of this document may be disclosed in any manner to a third party without prior written consent from Assetworks, LLC.
Version: April 19 2021

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

TAB 10: SAMPLE STATEMENT OF WORK (SOW)

Please see the following pages

© 2021 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

AssetWORKS

STATEMENT OF WORK

State of West Virginia

Q-08257

AssetWORKS

Enterprise Asset Management (EAM)



AssetWorks EAM Asset, Fleet, Inventory and Maintenance Management Applications

09.20.21

998 Old Eagle School Road, Suite 1215 | Wayne, PA 19087 | T: 610.687.9202 | F: 610.971.9447 | www.assetworks.com

Contents

Contents **2**

FleetFocus Introduction **5**

Implementation Approach 6

FleetFocus Project Task Descriptions **6**

WBS A.1.0 Initiation 6

WBS A.1.1 Project Management and Oversight Services 6

WBS A.1.2 Hardware Acquisition 17

WBS A.1.3 Software Installation Services 18

WBS A.2.0 Discovery 20

WBS A.2.1 Initial Requirements Assessment 20

WBS A.2.2 Business Process Review 21

WBS A.3.0 Design 23

WBS A.3.1 System Design Services 23

WBS A.4.0 Build 25

WBS A.4.1 System Configuration Services 25

WBS A.4.2 Data Conversion Services 28

WBS A.4.3 Technical Services 33

WBS A.5.0 Train & Test 50

WBS A.5.1 Pre-Training Testing Services 50

WBS A.5.2 Training Services 53

WBS A.6.0 Deployment 61

WBS A.6.1 Production Cut Over 61

WBS A.6.1 Post Implementation Period 62

FleetFocus Preliminary Schedule **63**

FleetFocus Milestone Schedule **63**

FleetFocus Optional Services **68**

FleetFocus Standard Assumptions **69**

CAM Table of Contents **76**

CAM Introduction **79**

CAM-1 Complete Project Start-up and Kick-Off Meeting **80**

CAM-1.A Project Startup Call 81

CAM-1.B Implementation Questionnaire 82

CAM-1.C CAM Sandbox Conversion Site Installation 82

CAM-1.D Data Export and Conversion Database Setup 83

CAM-1.E CAM Hosted Environment Installation 83

CAM-1.F Project Kick-Off 83

Milestone Responsibility Matrix 84

CAM-2 Deployment Phase 1 –Analytics and Planning Modules **85**

CAM-2.A CAM Setup and Configuration 85

CAM-2.B Data Loading 89

CAM-2.C CAM-AssetWorks EAM/FleetFocus Interface Configuration 93

CAM-2.D Readiness Testing 94

CAM-2.E Analytics and Planning User Training 96

CAM-2.F Analytics and CAM Go-Live Deployment 97

Milestone Responsibility Matrix 98

CAM-3 Deployment Phase 2 – Procurement Module **100**

CAM-3.A Procurement Setup and Training 100

CAM-3.B Customer Procurement Template Setup 101

CAM-3.C Load Test Environment 102

CAM-3.D CAM to AssetWorks EAM/FleetFocus Interface Configuration 102

CAM-3.E Test Procurement Workflows 103



CAM-3.F Load Production 104

CAM-3.G Procurement Production Deployment 104

CAM-3.H Procurement Production Go-Live 105

Milestone Responsibility Matrix 105

CAM-4 Deployment Phase 3 – Asset Disposal 108

CAM-4.A Review Disposal Work-Flow 108

CAM-4.B Setup Disposal Codes and Steps 108

CAM-4.C Load Disposal Steps to Test 108

CAM-4.D Test Disposal Processes and Interface 108

CAM-4.E Load Production 109

CAM-4.F Disposal User Training 109

CAM-4.G Disposal Go-Live 109

Milestone Responsibility Matrix 109

Project Organization 111

AssetWorks Project Team 111

Recommended WVDOT Project Team 113

Assumptions 115

Procedures for Handling Change Orders 117

Sole Source Provider 117

Confidentiality 118

FleetFocus Introduction

AssetWorks is pleased to partner with the State of West Virginia Department of Highways / Department of Transportation (WVDOT) for a successful implementation of the AssetWorks EAM (referred to in SOW as either AssetWorks EAM/FleetFocus, FleetFocus, or in shortened form FA) asset and maintenance management application for its Fleet assets. This Statement of Work (SOW) identifies the tasks required for the implementation of the FleetFocus solution. This SOW is based on AssetWorks' current understanding of the requirements and AssetWorks' previous experience with similar engagements.

AssetWorks recommends WVDOT use AssetWorks' expertise and consulting resources to ensure a timely and cost-effective implementation. AssetWorks offers a variety of services ranging from workflow re-engineering to general business and technical consulting.

This section includes our complete response to the scope of work associated with the implementation of the proposed solution. This scope addresses the following items as they relate to the WVDOT's RFP documents.

- Project management approach
- Project team discussion, including roles and responsibilities
- Detailed overview of our standard implementation approach
- Detailed activity/task timeline
- Discussion of data conversion approach
- Discussion of interface development approach
- Discussion of testing approach
- Discussion of training approach
- Listing of milestone deliverables and documentation for each task

To best facilitate the implementation, AssetWorks urges WVDOT to formally identify a core team of members from each of the critical business groups who will participate in or be affected by the project implementation. This involvement must come from all parties. This core team should be both technically qualified and knowledgeable of their groups' business practices. These individuals will be responsible for spearheading the system configuration, data mapping, and workflow tasks to ensure a feasible and effective production rollout.

The AssetWorks team will provide WVDOT with expertise in industry consulting, technical consulting for integration and data conversion, effective training for a wide variety of roles and functions, and project management and documentation to ensure the highest quality implementation.

Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and WVDOT will discuss these changes in good faith at their earliest opportunity.



Implementation Approach

In this document, AssetWorks has provided a detailed Statement of Work, which outlines our proposed implementation approach for the initial implementation of the AssetWorks FleetFocus solution for the WVDOT. AssetWorks implementation approach is built around industry and business standards for software implementation and project management. This standards-based approach allows us to focus on implementing the solution and focusing on those aspects of the project that represent the biggest challenges. This flexibility facilitates adjustments to the project implementation to accommodate the nuanced needs of our various customers and has yielded successful implementations for all our current and past customers.

AssetWorks follows a collaborative approach to the implementation effort, engaging WVDOT staff in each step of the process. This approach is built upon a foundation of knowledge transfer. As we work through the implementation together, WVDOT staff will become increasingly knowledgeable and experienced with the product, how and why configuration decisions were made, how the data was organized and loaded, how to load their own data and how to manage and execute workflows within the system. In our experience this approach leads to the quicker adoption of the solution by the organizations staff, and results in a much smoother transition from implementation to operations and enables the customer to take full ownership of the solution.

One of the important aspects of the proposed AssetWorks implementation methodology is the inclusion of business process discovery sessions and workshops to explore current and desired processes. AssetWorks will team with WVDOT to validate and define process, configure these processes into the proposed solution and prepare WVDOT staff to effectively operate the new AssetWorks solution.

FleetFocus Project Task Descriptions

WBS A.1.0 Initiation

WBS A.1.1 Project Management and Oversight Services

Project Management Philosophy

AssetWorks has a Project Management Office (PMO) to guide the application of project management best practices and standards for the execution of all projects. The objective of this organization is to facilitate the application of project management in a scalable manner to all projects executed by the AssetWorks professional services organization. Within the AssetWorks PMO, AssetWorks applies best practices and standards consistent with those advocated by the Project Management Institute (PMI through their Project Management Book of Knowledge (PMBOK). Project managers at AssetWorks are encouraged to obtain their PMP and many project managers within our PMO currently carry their PMP.

As part of our organizational focus on effective project management, AssetWorks has developed best practices and standards around all aspects of project life-cycle management. Project execution begins with effective planning and initiation of project, including project planning, scope and schedule finalization, risk and quality planning, and a formal project kick-off. Once initiated AssetWorks follows a structured and standards-based process throughout

the execution of the project, including risk and issue management, scope management and control, schedule and cost management and control, and quality assurance for all work activities associated with project execution. Finally, AssetWorks follows a structured project close-out process, which facilitates a smooth transition of the live production system to our customer care organization for the long-term success of the implemented solution.

Project Team and Kick-off Activities

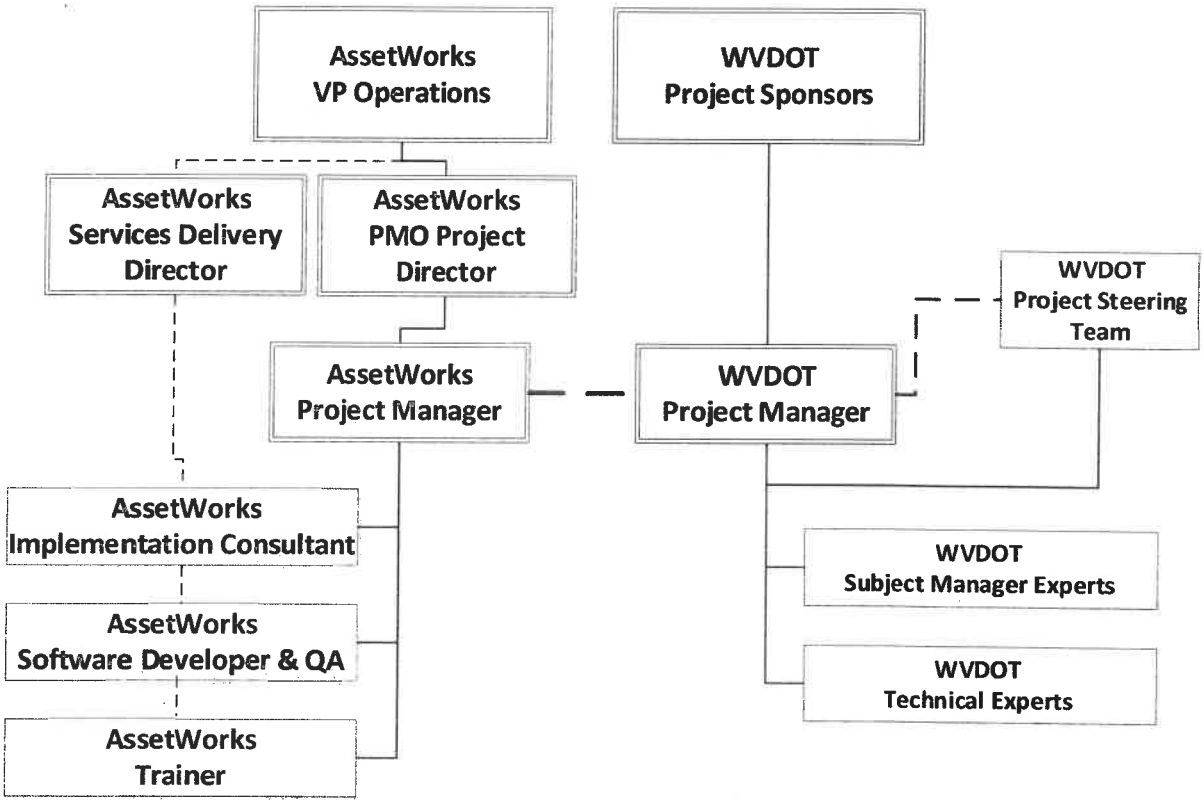
AssetWorks recommends WVDOT appoint a core project team with representatives from all functional or operational areas of WVDOT's business. This core group must have the authority and charter to make appropriate decisions regarding the implementation. The core group representatives should have complete knowledge and familiarity with WVDOT's operations and objectives, and will form the majority of the roll-out team later in the project. The WVDOT project team will define their roles and responsibilities and establish project standards and controls.

WVDOT will appoint a dedicated Project Manager, Subject Matter Project Leads, and supporting personnel from the designated WVDOT functional and operational areas for the duration of the project. The WVDOT Project Manager will lead the overall WVDOT project team and be responsible for the WVDOT personnel and resources on the project and WVDOT task follow-up and completion. The Project Leads will be responsible for the configuration and implementation of AssetWorks FleetFocus and for facilitating decisions among the core maintenance group.

AssetWorks will work with the WVDOT project manager to review AssetWorks' standard project management processes, which are based on the Project Management Institute's PMBOK® guides and standards. The process will include tools used for status reporting along the lines of integration, scope, time, resource, communications, cost, risk, quality, and procurement. The Project Managers will jointly define the schedule for project status meetings and communication channels.

Project Team

AssetWorks will assign a dedicated Project manager, who will work with the WVDOT project manager and technical staff to guide the WVDOT through a successful implementation. In addition, AssetWorks will provide the necessary consulting and technical resources to complete all aspects of the project as defined by AssetWorks deliverables in this statement of work. This will include consulting and technical implementation staff to facilitate interface and data migration design, development staff to facilitate the development of system interfaces, and trainers to support the training activities.



WVDOT Resources

AssetWorks assumes that all WVDOT project team resources will be committed to the project as of the project start date.

AssetWorks further assumes that WVDOT will provide the following resources to ensure a successful implementation.

Project Steering Committee –The role of the Project Steering Committee will be to participate in setting the goals and scope of the project and to participate in periodic status meetings with the project team.

Project Manager - The Project Manager will be assigned with appropriate decision-making authority. This person will be the primary point of contact for the WVDOT with AssetWorks and will be engaged in all aspects of the implementation effort. This person should be able to access and organize WVDOT resources, schedule workshops and meetings, commit to dates and timelines, and facilitate completing the activities require WVDOT staff participation.

Subject Matter Experts - These resources will be considered part of the core project team and will participate in tasks including data clean-up and migration, system configuration, and project team training. Often these experts consist of functional Leads in their respective areas of expertise (e.g., maintenance), as well as other supporting

personnel from the various departments. The resources designated for these roles should have a good working knowledge of how WVDOT processes are performed and understand the reasons for the current processes.

Technical Experts – A team of technical experts will be involved in the technical duties that come with an AssetWorks implementation. Examples include:

- System Administrator – who will support basic IT administrative functions, including server administration, web server administration, network and security for the web, application, and database server, etc.

Anticipated WVDOT Staff Time Commitment

The following table provides an estimate of the time commitment for WVDOT staff. These estimates are to be used as a guideline for project staffing purposes and are derived from AssetWorks experience with other customers implementing the solution in a similar sized organization.

PROJECT IMPLEMENTATION ROLES AND RESPONSIBILITIES

Customer Resource	Resource Code	Estimated Time Commitment	Description
Project Manager	PM	50% or more	This individual will be the lead for the project and engaged in all aspects. This role will include activities such as: • Facilitating internal meetings with customer project team to keep project on track • Managing the delivery and preparation of legacy data • Facilitating the review and feedback on deliverables • Assisting with clearing internal roadblocks for process and design decision in regards to application setup, workflow processes, custom interfaces/reports, enhancements and training/go live requirements and schedules • Attending AssetWorks status meetings • Reviewing and responding to AssetWorks status reports • Reporting to internal stakeholders on progress of AssetWorks project
User Administrator	UA	50% during implementation 25% during live operations	The User Administrator is a key role for executing the implementation of the AssetWorks system. This role will include activities such as: • Inputting system configurations • Providing review and feedback • Executing data loading • Providing input and assistance in design and testing of custom interfaces, reports and product enhancements per the project scope • Facilitating initiate functional testing • Facilitating and assisting in trainer and user training • Facilitating in live system cut-over activities and on-going user support. • Communicating internally with customer PM on activities and progress on deliverables

Subject Matter Experts	SME	20 to 40%	The involvement of subject matter experts in each service area is a critical part of the implementation. The involvement with be higher at some point and lower in other, but as a rule of thumb it is useful to plan to spend between one day and 2 days per week during the implementation phase of the project. This role will include activities such as: • Providing guidance and feedback on workflows and requirements to align these with AssetWorks functionality • Providing review, extraction, and cleansing of legacy data • Participating in design session for mapping data and workflow needs into the AssetWorks system • Providing input and assistance in design and testing of custom interfaces, reports and product enhancements per the project scope • Providing review and feedback of all relevant deliverables • Participate in system testing • Communicate internally with customer PM on activities and progress on deliverables

ONGOING OPERATIONS ROLES AND RESPONSIBILITIES			
Customer Resource	**Resource Code**	**Technical Skills**	**Description**
System Administrator	SA	Software specific (AssetWorks EAM/FleetFocus)	Needed for the creation and deactivation of users, employees, etc.
User Administrator	UA	Software specific (AssetWorks EAM/FleetFocus)	Continue to review release notes, learn new functionality, and support internal end users (10-20%)
Reporting Assistance	RA	Crystal Reports; Crystal Designer	Dependent on customer need to have an in-house report writer to assist with development and tweaks to AssetWorks EAM/FleetFocus out of the box Crystal Reports using Crystal Designer; end users can use the AdHoc Query module to build simple reports inside the system. AssetWorks can provide custom Crystal Reports on a quoted basis if needed.

Project Kick-Off

Prior to scheduling the onsite project kick-off meeting, the AssetWorks account management and assigned project manager will meet to internally transition the project for implementation, at this time the AssetWorks project manager will be formally assigned and the AssetWorks project manager will reach out to the WVDOT team to plan and schedule the project kick-off meeting and other activities.

Once the project kick-off schedule is defined, AssetWorks will prepare and facilitate a project kick-off meeting. The kick-off meeting will consist of an introduction to the project for WVDOT's core implementation team. The meeting will review the project scope and timeline as well as review the roles of each team member and expectations for project participation. Following the project introduction, AssetWorks will host an initial product training and orientation session to review the software with the WVDOT project team and appropriate WVDOT asset management and maintenance staff. The goal of this training session is to prepare WVDOT staff to effectively

participate in all aspects of the implementation effort. The onsite kick-off meeting is expected to be a maximum of three days with the AssetWorks project manager and principal Implementation Consultant in attendance.

After the kick-off meeting, AssetWorks will work with WVDOT's project manager to finalize the project plan based on information that was discussed at the kick-off meeting.

Deliverable for Project Kick-off

- Project Management Plan, including
  - Draft project plan/schedule for the initial implementation with WBS tasks per the SOW
  - Scope management plan, including change control, action, and decision log
  - Communications management plan
  - Change control process
  - Project Workbook
    - Risk plan and register
    - Issue tracking log
    - Status reporting
    - Decision log
- Project kick-off meeting
- Project orientation training session

Project Management - Monitoring and Controlling Services

AssetWorks will provide project management monitoring and control services to execute the project plan. The AssetWorks' project manager will coordinate all AssetWorks project activities. AssetWorks will provide the following project management services:

- Coordination of project resources and work so that milestones are met in an efficient manner; tasks will be designed to reasonably minimize implementation time and cost while taking into consideration resource and time constraints such as WVDOT staff availability. WVDOT is responsible for managing their assigned tasks and staffing for those tasks.
- Serve as the main point of contact for the WVDOT project manager
- Provide updates to the work plan and project budget every month
- Ensure quality deliverables
- Communicate and resolve project related issues and risks

The AssetWorks PMO Manager will serve as the project director to provide additional project oversight and guidance to help the assigned project manager monitor the project resources and budget and ensure quality delivery of services. This manager is WVDOT's first escalation point for any issues arising during the project.

The AssetWorks Project Manager will monitor the project resources to ensure quality delivery of services and that the deliverables are completed on time and in accordance with the project requirements.

Scope Management

As part of the overall project management approach, AssetWorks will implement and follow specific scope change control procedures. This will include both regular status updates, which may vary in frequency throughout the project as deemed necessary by the AW and WVDOT project managers, as well as formal status meetings, typically bi-weekly, to review progress, issues, and potential requirement changes throughout the project. As identified issues or requirement changes occur, these will be documented in the project issue log for tracking and auctioning throughout the project.

If an issue requires a change to the scope, or will introduce additional requirements to the project, these will be documented in the project change log, and the AssetWorks PM will review these potential changes with the WVDOT PM to determine the need and priority for the change. If the change is something that will be required, then the next determination would be who will be responsible for executing the change, if the change will result in a change of scope requiring additional support or effort from AssetWorks and formal change order request will be developed and provided to WVDOT for review and approval to be added to the scope of work. Any changes to the scope of work will be reflected in the project decision log and will result in updates to the project scope of work, schedule, and budget, including the addition of any additional milestones. Only after all parties agree on the need for the change, and the plan for integrating the change into the overall implementation project plan, would AssetWorks begin work on this change.

Schedule Management

As with the scope management, changes to the schedule will follow the same change control process outlined above. All potential changes to the schedule, either because of scope changes, or other internal/external factors will be documented in the project issues log, if a change is necessary the decision will be documented in the decision log and recorded in the project change log. Only after the project team formally agrees to the change will it be implemented in the schedule.

Risk Management

AssetWorks follows PMI best practices as it relates to project Risk management. As part of the project kick-off activities potential areas of risk will be documented in the project risk register, which will be subject to review at all project status meeting and discussions. Risks will be monitored for their triggering events, and mitigation strategies will be defined ahead of time to be able to effectively address risk as they become issues. In the register Risks will always be documented using the structure Cause – Risk – Effect to effectively understand the risk at its impact, and to define effective mitigation strategies in advance of the project risk occurring.

Quality Management

AssetWorks will provide for both collaborative development and draft review with the WVDOT project team for all consulting deliverables, once the draft deliverable process is complete, all deliverables undergo an internal peer review process to validate both the content of the deliverable, as well as the form of the deliverable to facilitate the delivery of quality in for content and form.

To ensure product quality, AssetWorks performs detailed manual testing of enhancements and changes included in each release before the release is made available, as well as regression testing to ensure continued quality of stable areas of functionality. AssetWorks also utilizes automated testing cases in some areas of the application to



further reduce defects or configuration issues. Furthermore, any custom deliverables such as interfaces are also inclusive of internal AssetWorks testing as well as testing with the customer once installed in the test environment. All interfaces are signed off on by the customer and the AssetWorks Customer Care team before moved into the production environment to ensure a successful launch and ability for the Customer Care team to support each interface post go live.

Communication Management

As part of the overall project management plan, AssetWorks will provide a communication management plan, which will include guidance on the most adequate forms of communications for the project team, this will include protocols for use of email, meeting, and verbal communications. It will define the schedule for the regular status meeting and check-ins. Typically, AssetWorks will hold regular weekly status check-in meeting for the project management team, as well as regular formal status meeting on a bi-weekly basis though that frequency is variable depending on current project activities and the overall schedule.

Process Change Management

Process Change Management is an integral part of the overall AssetWorks implementation approach. Our approach is proactive and begins with the business process review and recommendation phase through the system configuration effort, system testing and training portion. AssetWorks pursues a mentoring and knowledge transfer approach to training, which endeavors to make our customers self-sufficient within the system through the implementation process.

Thus, throughout the process, AssetWorks will work with WVDOT users to define changed business process, test and validate the recommendations through interactive and continual testing, and then once implemented, and train key users to be trainers that will then train all WVDOT users internally to use the system within the framework of the changed business processes. In this way, AssetWorks believes that our customers gradually take ownership of the system and the new workflows and processes during implementation and are prepared to work independently and effectively once the system is in live production use.

Project Management – Additional RFP Requested Plans in Project Initiation

AssetWorks is willing to discuss each of these areas further to better refine scope and the associated cost of the individual plans listed below from the required RFP pricing matrix. As some of the plans requested appear to have an overlap of items, this further assessment with the customer, may result in a possible reduction of cost for the items listed below. All plans listed below are AssetWorks assessment of the requirements put forth in the WVDOT RFP and each will be presented as a draft with the expectation that WVDOT actively participates in feedback and the final version of each plan deliverable.

- Project Work Plan – post kick-off meeting, a revised/finalized project plan/schedule for the initial implementation with WBS tasks per the SOW will be provided. AssetWorks will note AssetWorks tasks and where appropriate WVDOT involvement and recommended role, but not estimated hours for the WVDOT as this varies heavily by customer. In addition, AssetWorks will not list out individual WVDOT tasks as these are to be managed separately by the WVDOT's project manager. However, AssetWorks will



advise WVDOT on their responsibilities for the overall project at each stage to ensure an efficient project schedule. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.

- Project Management Plan – these details are noted above but included here again for overall review. They are delivered as part of the project kick-off and final adjustments will be made post kick-off meeting where necessary. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
    - Draft project plan/schedule for the initial implementation with WBS tasks per the SOW
    - Scope management plan, including change control, action, and decision log
    - Communications management plan
    - Change control process
    - Project Workbook
        - Risk plan and register
        - Issue tracking log
        - Status reporting
        - Decision log
- Quality Management Plan
    - Identifies the activities, processes, and procedures used to manage quality at AssetWorks as it relates to the FleetFocus Implementation Project.
    - Defines the quality management methodologies, best practices, roles and responsibilities, training and communication required throughout the life cycle of the FleetFocus Implementation Project.
    - Ensures all project deliverables and artifacts conform to this plan.
    - Defines the quality planning, Quality Assurance, Quality Control and quality improvement processes, and procedures.
        - The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Knowledge Transfer Plan – AssetWorks believes in a collaborative and on-going methodology of knowledge transfer including the 4 stages of "Identify, Integrate, Educate and Monitor". As a formal deliverable it will include the following by these stages.
    - **Identify** – Identify critical people/roles and knowledge (internal & application) to outline these roles in the "as is" and the "to be" processes so as to outline common processes for identifying and prioritizing key areas of the implementation and the matching key people/roles.
    - **Integrate** – Integrate where and how knowledge is being captured and transfer new processes to succession planning, in terms of new roles that the organization will adopt as part of the implementation and the associated FleetFocus specific training required for that resource. Though primarily focused on resource roles, there will be notations where program integration is required but further detailed out in the Interface Plan noted below.
    - **Educate** – Educate and list the areas in which training will be required for the new application roles to be successful and the plan to provide this training including recommendations for the on-going support system the customer is expected to put in place internally.
    - **Monitor** – Involving the core project team as well as end users early and often, is a key recommendation in this phase that will describe how both knowledge and tools (AssetWorks



approved tools such as data loader, MAXQueue middleware, etc.) will be used and how the customer can focus on using FleetFocus features and out of the box reporting to track measurable results.

- The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.

- Stakeholder Engagement Plan – AssetWorks views successful stakeholder management in the context of the appropriate engagement content and format aligned to the right stakeholder group. The plan will outline the following areas by Stakeholder. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
  - Areas of influence/interest
  - Project Phase
  - Stakeholder manager (hierarchy)
  - Engagement approach
  - Engagement tools
  - Frequency
- Organizational Change Management Plan – As noted earlier in this SOW, change management in terms of process is a natural aspect of all AssetWorks projects and a focus with the stakeholders. AssetWorks is proposing to deliver a plan that will list the objective, main activities and expected output for the standard 3 phases of OCM. The final version requires heavy customer input and adjustments to the document as AssetWorks expects the customer to utilize this document internally to implement their own organization change management (OCM). It will also note any deliverables agreed to during this stage and based on the final set of items approved, the milestone for delivery of noted OCM materials may be adjusted in scope and cost. Note that all OCM materials to be delivered will focus solely on the main maintenance user roles for the application to include only supervisors, technicians, and storekeepers and not to exceed 10 overall pieces of OCM materials. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
  - Preparing for Change
  - Managing Change
  - Reinforcing Change
  - Note: the RFP addendum responses indicated no formal deliverables, but the RFP requirements listed designated areas in the pricing sheet. As such and if necessary, AssetWorks can remove this from the final scope to reduce overall costs for the project but still offer quality consulting as part of the project to achieve effective organization process management. AssetWorks has successfully implemented many large-scale projects without a formal OCM plan.
- Master Test Plan – AssetWorks has a standard test plan for all FleetFocus implementations that covers the standard and best practice workflows utilized within the FleetFocus starter database. This standard test plan will be delivered at the start of the project for the customer to review as part of orientation and throughout the business process review (BPR) services in A.2.2. Adjustments will be made jointly by AssetWorks and the Customer pending the outcome of the BPR and fit/gap and requirements traceability matrix. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.

- Data Conversion Plan – AssetWorks will deliver a data conversion plan to include the AssetWorks approved tools to be used, named legacy systems, a description of the process and methodology, stages and data requirements noted in the SOW for the data elements and limitations scoped for in the SOW and found in A.4.2 Data Conversion Services. This plan will later be complemented with a remote data conversion service session designed to engage with the customer and review and set expectations on roles and responsibilities, again as noted in the SOW in A.4.2. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Interface Plan – AssetWorks will deliver following the business process services, to include the fit/gap and requirements traceability matrix, an overall interface plan. This plan is to include the AssetWorks approved tools to be used, named legacy systems, direction of interfaces, matrix of interfaces included, diagram of only scoped FleetFocus interfaces and the associated WVDOT's system, a description of the design process and testing methodology, and data exchange methods requirements noted in the SOW for the data elements, assumptions and limitations scoped for in the SOW and found in A.4.3 Technical Services. This document will serve to assist the WVDOT in their final determination of the required interfaces for the FleetFocus implementation project and if any should be expanded, removed, or added from this SOW with the appropriate change control and scope re-definition required to make those changes. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Training Plan – AssetWorks maintains a standard training plan that includes the training courses listed in A.5.2. However, this standard training plan will be expanded where needed to remove or add in additional FleetFocus specific training and update roles for training as determined as part of the BPR phase in A.2.2. The training plan will also include an overall schedule and ability to track participants who have completed the required training classes. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Go-Live Deployment Plan – AssetWorks will deliver a go-live deployment plan to track the required activities necessary to facilitate a successful go live for WVDOT. This plan is to include pre-cutover tasks, timing of these tasks, data load elements (i.e., part prices, parts quantity on hand, next PM due date and last meter PM performed, etc.) required before go-live and the deadline for this data, data required by WVDOT to stage (i.e., open purchase orders, etc.) a process for how the interfaces will go live in accordance with the new system and an event based sequence for the overall cutover. The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Post Go-Live Plan – AssetWorks will work jointly with the customer to determine a post go-live plan that facilitates the successful adoption of the system and the best practices and workflows decided by WVDOT. This is to include the recommendation of running several out of the box reports to measure overall organization health, strategies, and expectations for managing the interfaces, common system management techniques, project post-mortem review and eventual Customer Care transition plan to include available resources as a customer provided by the Customer Care team and the Community (online help center). The milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.



Deliverable for Project Management Services

- Project kick-off meeting - 1 travel trip with two resources
- Relevant status reports, issues log, and meetings regarding AssetWorks FleetFocus Implementation progress
- Project Management Plan to include the initial Project Work Plan (detailed project plan and initial schedule)
- Additional Overall Plans – for each plan, the milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
  - Quality Management Plan
  - Knowledge Transfer Plan
  - Stakeholder Engagement Plan
  - Organizational Change Management Plan
  - Master Test Plan
  - Data Conversion Plan
  - Interface Plan
  - Training Plan
  - Go-Live Deployment Plan
  - Post Go-Live Plan
- Bi-weekly status meetings & Project Work Plan updates
- Monthly stakeholder meetings

WBS A.1.2 Hardware Acquisition

AssetWorks recommends the following hardware configuration and hardware specifications for the WVDOT's implementation. Any recommendations noted in this SOW are subject to change and defer to FleetFocus product documentation available on AssetWorks' customer site, the Community.

Workstation Specifications

A machine that meets the following specifications is recommended:

- 8 GB RAM
- 25 GB available hard disk space
- Mouse and Keyboard
- Minimum 17" Monitor (minimum resolution 1024 X 768)
- 10/100/1000 Mbps Ethernet NIC

Additional Requirements for Any Configuration

In addition to the above, AssetWorks also recommends WVDOT procure the following:

- An appropriate number of printers

- AssetWorks recommends 19" monitors to take better advantage of the FleetFocus screen and window capabilities.

Customers are responsible for any site preparation or construction or communications or cabling infrastructure. This is mainly for customers implementing projects with additional hardware such as for KeyValet, FuelFocus, etc. If this is the case, further scope will be listed later in the statement of work or supporting AssetWorks Product documentation surrounding those requirements and is available upon request.

WBS A.1.3 Software Installation Services

Database and applications

As part of going SaaS with AssetWorks, we will create the non-production and production (test and prod) FleetFocus environments as well as a reporting environment. AssetWorks Customer Care will work with the AssetWorks Project Manager to schedule the installations and provide updates accordingly for project schedule purposes.

Once installed, the URL and login information to the production and non-production system will be provided to WVDOT. It is recommended, when possible, that the WVDOT have separate workstations and/or tablets for technicians to login to the system to maximize the efficiency of capturing real-time labor and avoid the delays in updating work orders with notes, labor, etc. that would come with shared computers. All workstation and browser recommendations are contained within product documentation and can be provided on request. A chart is listed below, however that is subject to change with new releases and updates from the AssetWorks Product Management team.

The WVDOT will also be provided with the details of the reporting instance's connection information. Additional database instances/environment required are not included in this SOW but can be reviewed with WVDOT to determine future inclusion in scope.

Browser Versions

Supported for use of Web Modules on both Desktop and Tablet Operating Systems

	IE 11	Edge Chromium	Chrome
18.0.x	x		x
19.0.x	x		x
19.1.x	x	x	x
20.0.x	x	x	x
20.1.x	x*	x	x
21.0.x		x	x

Primary certifications performed in Windows-based desktop operating system environments. Other supported operating systems or platforms may have specific limitations per-device based on hardware or software.

Internet Explorer compatibility mode is not supported.

Firefox has known compatibility issues and is not recommended.

*Mapping is not supported if using IE11.

Deliverables for Software Installation Services

- Installation of AssetWorks software in a production and non-production environment
- Reporting database connection information for use with the Crystal report writer license
- NOTE: additional environments are not in scope for this project as AssetWorks is able to successfully utilize the above listed environments for projects of this size and type of services engagement. However, AssetWorks is willing to discuss in detail alternatives with WVDOT to find the most efficient approach for both parties.



WBS A.2.0 Discovery

WBS A.2.1 Initial Requirements Assessment

AssetWorks will conduct one set of workshops for (sessions are not repeated for multiple sub-groups) the WVDOT core project team who are participating on this implementation to review the requirements listed within the RFP documents. The review of requirements will be a precursor to the Functional Design process to follow. After reviewing the WVDOT's requirements matrix with WVDOT's staff, AssetWorks will map the requirements to the existing functionality of the FleetFocus application. AssetWorks will document which modules, screens, reports or Ad Hoc Queries will satisfy each requirement. This process will enable AssetWorks to either validate our assumptions from our initial review of the RFP documentation, or to make revisions and refinements. Further, this review will enable AssetWorks and the WVDOT to agree on the potential for custom reports, development of custom, pre-defined ad hoc queries, and the configuration of out of the box notifications or custom notifications. These recommendations can then be aligned to the specific user group and associated project phase should they be elected. Custom reporting or interfaces not listed in this scope of work are out of scope.

As a result of this review AssetWorks will be in a position to work with WVDOT to finalize the priorities for certain requirements, determine which requirements will be addressed with the out-of-the-box capabilities, or which requested capabilities may be satisfied with changes to workflow by WVDOT. The result of this effort will be a revised requirements matrix, which will facilitate the traceability of requirements to support the functional and user testing phases later in the implementation effort.

Further, as part of this process AssetWorks will review the possible points of integration with other WVDOT systems, and work with WVDOT to finalize the specific needs and priorities for interfaces. This process will enable AssetWorks to validate assumptions and work with the DOT to finalize the scope of interface development and prepare a final scope and budget for integrations for the new AssetWorks system. Full specification and data mapping documents will be created later in the project once the final list of interfaces is determined but will not be done at this early requirements validation stage.

AssetWorks will prepare a report that identifies the primary requirements, provides recommendations on how to accomplish those with the available software, will identify specific needs for legacy data, and data development to support system configuration, and will document the required integrations for the future system.

Deliverable for Requirements Definition and Review Services

- Fit/Gap Report
    - Recommendations for data migration and configuration
    - Recommendations for reports and defined queries
    - Recommendations for interfacing to other systems
    - Summary and recommendations for notifications and potential software modifications to be incorporated into the project
- Requirements Traceability Matrix initial draft – to be finalized based on further Business Process Services and System Configuration decisions based in later project phases.

WBS A.2.2 Business Process Review

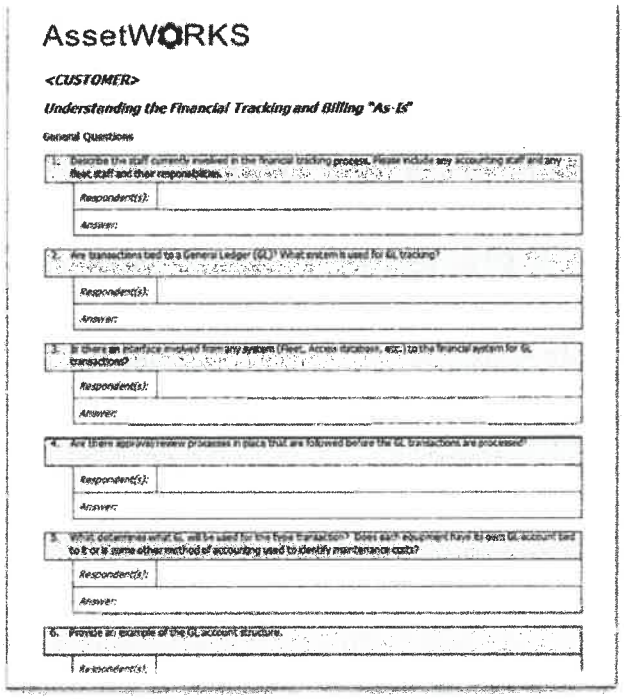
Upon completion of the fit/gap report, AssetWorks will begin the business process review phase as a means of understanding the "As Is" and desired "To Be" environment. AssetWorks will perform a high-level Business Process Review (BPR) of WVDOT's assets (including fuel), inventory and maintenance management activities. During the BPR, AssetWorks will observe WVDOT's existing operations and work with WVDOT's team to identify where improvements can be made.

The Business Process report will identify and document practices and procedures that can be adapted to the capabilities of the AssetWorks FleetFocus software to provide a more effective operation and a smoother implementation and operation of AssetWorks FleetFocus. AssetWorks will perform the following tasks as part of the BPR:

Conduct Workshop Sessions

AssetWorks will provide questionnaires for relevant WVDOT personnel. The initial interview sessions will provide the AssetWorks project team with the opportunity to assess the current business practices. The AssetWorks project team will observe efficiencies and redundancies in the system and propose new processes. The interviews and sessions will provide AssetWorks with the following:

- Awareness of how WVDOT works and processes data
- Review and understanding of current user stories developed by the various functional groups as defined in the WVDOT RFP documents
- Ability to define information processes, functions, and functional areas



AssetWORKS

<CUSTOMER>

Understanding the Financial Tracking and Billing "As-Is"

General Questions

1. Describe the staff currently involved in the financial tracking process. Please include any accounting staff and any fleet staff and their responsibilities.

Respondent(s):

Answer:

2. Are transactions tied to a General Ledger (GL)? What system is used for GL tracking?

Respondent(s):

Answer:

3. Is there an interface involved from any system (Fleet, Access database, etc.) to the financial system for GL transactions?

Respondent(s):

Answer:

4. Are there approval/review processes in place that are followed before the GL transactions are processed?

Respondent(s):

Answer:

5. What determines what GL will be used for the fuel transaction? Does each equipment have its own GL account tied to it or is some other method of accounting used to identify maintenance costs?

Respondent(s):

Answer:

6. Provide an example of the GL account structure.

Respondent(s):

- Assessment of the likely adoption of future state processes and recommendations

AssetWorks will conduct interview sessions for the following functional areas.

- Asset Management, which will address topics including acquisition, disposal, depreciation, and total lifecycle management along with fuel processes
- Maintenance Management, which will address topics including opening work orders, work assignment, labor hour tracking, indirect time, reviewing work orders, requesting parts, and other work management functions such as PM scheduling, PM programs, and the development of PM checklist items
- Inventory and Purchasing Management, which will address topics including inventory management, charging materials, creating purchase requests, replenishment, handling parts warranties, dealing with serialized parts, and other inventory management functions

These sessions will be conducted with key staff from the various identified functional areas at WVDOT.

Functional TO BE Documentation

After completing these sessions, AssetWorks will compile the results of the interviews and document the recommended future state processes and workflows. AssetWorks will present these recommendations to WVDOT in a **"Conference Room Pilot"** (CPR) format to review the recommended workflows and processes and gather final feedback from WVDOT.

Based on the results of the working sessions and the Conference Room Pilot, AssetWorks will prepare a future state report and submit the final version to WVDOT. This report will be a document of approximately 25-35 pages. The documented processes and workflows will identify recommendations for changes to existing workflows and business processes with the objective being the:

- Elimination of non-value added administrative activities such as manual re-entry of data and paper based maintenance management processes.
- Identification of the information that needs to be captured within the data to support the maintenance management programs and business processes to be supported with the AssetWorks FleetFocus solution.
- Identification of the information that needs to be captured within the data to support the required performance metrics.

Deliverable for Business Process Assessment

- Fit/Gap and Requirements Traceability Matrix – 1 travel trip with one resource
- BPR Workshops Sessions with Key Staff – 1 travel trip with one resource
- Functional Future State Report - BRP
- Conference Room Pilot (CRP) – 1 travel trip with two resources

WBS A.3.0 Design

WBS A.3.1 System Design Services

System Design & Setup Consulting

After the business process discovery sessions, AssetWorks will lead system setup sessions to complete the coding conventions for equipment numbering, equipment classes, repair codes, PM schedules, PM parameters, PM checklists, and other items. AssetWorks will also review the setup for all the modules being implemented as part of this project.

WVDOT's preparation for this engagement includes the assimilation and distribution of relevant inventory, purchasing, operations, and maintenance data prior to the meeting. The goal for these meetings is to achieve at least 90% of the standard coding schemes and business practices required for system roll-out. The coding schemes listed on the agenda will be defined based on best practices with AssetWorks making recommendations as we better understand the WVDOT's standards (e.g., tasks (6-9 digit), work accomplished codes, condition ratings, position, etc.) and with maintenance classes like NAFA or AWPA.

One of the strategies for success during this project that AssetWorks uses is to actively utilize the FleetFocus Starter Database. The AssetWorks Professional Services team has jointly architected this based on the experience of hundreds of past deployments and it is consistently refined each product release to be optimized for an asset maintenance organization. It contains many industry standard coding schemas, user groups with baseline security setup, best practice workflow settings and pre-configured portals designed for the WVDOT to review and make modifications to versus creating brand new coding structures.

This approach ensures that customers get up and running more quickly and allows for a greater engagement on making informed decisions and facilitates stronger change management to new processes as workflows can be quickly demonstrated. The starter database will be installed in the Production and Test environment with the test version containing sample assets, classes, parts, etc. This is intentional so that post each setup session a customer can login to practice and learn the system allowing for an easier transition time to the new application and processes along the way. AssetWorks has found to create a stronger user adoption for the core project team who then extend that knowledge more easily down to the end users at go live.

Deliverables for System Setup Consulting Services

- Conduct multiple remote sessions (12 setup sessions) to review core codes, starter database and discuss initial workflow design conversations; services are fulfilled at the conclusion of the sessions with the understanding additional follow-up is to occur during the System Configuration Services phase. These sessions are recommended to be remote and paced a few days apart so as to keep adequate time in between each topic for better user engagement and retention.

System Setup Session Topics by User Role – *see Application Design Guide for topic breakdown*		
Session #	FleetFocus System Setup Meeting	Customer User Role(s)
1	FleetFocus Application Overview &New User Orientation	Core Project Team

2	Organization Structure	Core Project Team Program Office Manager Finance Manager
3	Application Security & Equipment Management - Part 1	Core Project Team Asset Manager IT / Network Administrator
4	Equipment Management - Part 2	Core Project Team Asset Manager Program Office Manager
5	Work Management – Part 1	Core Project Team Supervisor Lead / Technician Lead
6	CHECKPOINT – Progress Review	Core Project Team
7	Work Management – Part 2	Core Project Team Supervisor Lead / Technician Lead
8	Warranty & Fuel	Core Project Team Fuel Manager Warranty Administrator
9	Materials Management	Core Project Team Storekeeper Lead
10	Purchasing	Core Project Team Storekeeper Lead
11	Financial Tracking	Core Project Team Finance Manager
12	Portals and Options	Core Project Team

Finalize data definition and workflows

WVDOT will take "action items" from the System Set-up Consulting sessions to finalize the definition of all relevant FleetFocus data elements and work processes, including maintenance, parts management, procurement, and other job functions. WVDOT's deliverable for this task is to complete documentation of WVDOT's definitions for all applicable FleetFocus data elements. This deliverable is a critical prerequisite to the configuration of the system. AssetWorks will work with WVDOT to prepare this documentation. It is recommended to work on these items as soon as possible following setup overview sessions to ensure a more complete comprehension of the material being covered.

During the data definition process, WVDOT will also be asked to start collecting certain data as the items are covered during the system setup consulting sessions. This data may be converted and loaded to the application based on the project timeline in conjunction with the other setup tasks for the various modules licensed.

AssetWorks will also work with WVDOT team to configure FleetFocus per the discussed workflow in the system setup consulting sessions. This configuration will build on the setup defined with WVDOT core team and will focus on specific decisions, such as location options, department settings, etc. WVDOT will be required to perform setup tasks as assigned by AssetWorks.

WBS A.4.0 Build

WBS A.4.1 System Configuration Services

Configure and Review Pre-Setup Starter Database Modules and Portals

AssetWorks will review settings to setup desired workflow and provide an orientation for the following modules. Only the modules listed below will be configured and setup as part of this statement of work regardless of additional modules available via customer's final licensing agreement.

- Enterprise Portal – The Enterprise Portal module is a web-based alternate end user interface to the base application logic. The module provides a familiar look-and-feel to grid and tabs, function buttons, and screen menus, while removing the need for a client-side (GUI) installation. Users have access to all the same screens and functions as through a GUI but now access the screens through a standard web browser. It is primarily used for application setup and system administration management of AssetWorks FleetFocus FA in complement to the Shop Activity web portals.
- Shop Activity Module – The Shop Activity module manages workflow driven portals for activity happening in a shop or out in the field and with an external customer.
    - Work Management Module - The Shop Activity Work Management Portal is designed to provide supervisors with access to all the screens and functions required during their workday. Supervisors can use the portal to do the following: view and assign work, view current status of employees on the shop floor, view equipment repair history, service requests, and messages, request or post parts for work orders, create and update test results related to work orders, complete PM checklists for PM and inspection services, enter complaint, cause, and correction detail for repairs performed, add comments and notes to work orders, create new work orders, create new service requests, and assign employees to existing work orders.
    - Technician Module - The Shop Activity Technician Portal is designed to provide technicians with access to all the screens and functions required during their workday. Technicians can use the portal to do the following: view work assigned to them, log on and off of tasks, view equipment repair history, service requests, and messages, request or post parts for work orders and view status of past requests and postings, add comments and notes to work orders, create and update test results related to work orders, complete PM checklists for PM and inspection services, enter complaint, cause, and correction detail for repairs performed, create new work orders, manage service requests, and print work orders.
    - Storekeeper Module - The Shop Activity Storekeeper Portal is designed to provide storekeepers with access to all the screens and functions required during their workday. Storekeepers can use the portal to perform the following functions: manage part requests or requisitions, order parts, and create new parts.

- Service Request Module - The Service Request Portal is designed for deploying and displaying Service Request entries. It gives your organization the option to relieve the burden on shops or call centers that record requests from employees and operators for asset maintenance or vehicle service by allowing individuals to log the requests themselves. Using the kiosk feature eliminates the need for each operator to have a login for entering and displaying vehicle service requests.
- Notification Module – The Notifications module provides instant alerts of important information and scenarios for better communication and tracking. A collection of out-of-the-box notification scenarios are provided. AssetWorks will assist in the configuration of up to 3 "out of the box" notifications for customer use. This module is included in base FleetFocus FA.
- AdHoc Query Module - The Ad Hoc Query Module provides secure ad hoc query capabilities. It allows users to build their own queries, format the display of the results, export the results, and save queries for future use and sharing with others. AssetWorks will review a sampling (3) of the created, out of the box ad hoc queries. AssetWorks will not create new customer specific custom reports. AssetWorks will show WVDOT how to adapt one report and in addition, how to setup permissions for reports. This module is included in base FleetFocus FA.

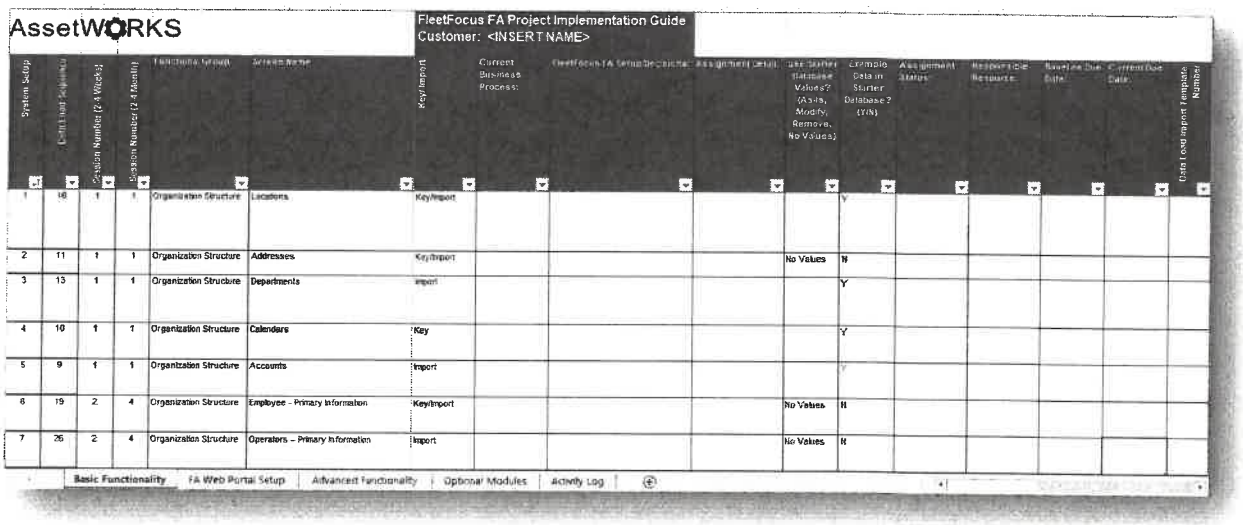
- Reporting Module – The Reporting Module takes data stored in your database and reformats it into information that can assist in effectively managing operations. At the same time, it opens visibility into your operations by publishing professional reports over a zero-client, browser interface. The Reporting Module will provide standardized reports as well as accessibility to real-time data and report automation using Crystal Reports; training on Crystal Designer is not included and modification of out of the box Crystal reports by AssetWorks is not included in this scope of work. The creation of custom reports is not included.
- KPI/Dashboards Module - The Dashboard Module provides real-time access to your database through easy-to-interpret, out-of-the-box gauges and charts. Dashboard elements provide instant insight into your maintenance key performance indicators via a standard web browser. You may provide access to dashboards to anyone in your organization with an authenticated login, without the need to install any software on their machines. AssetWorks will review and make the following dashboards available for use:
  - Fleet Availability
  - Work Order Aging (WO's by # of Days Opened)
  - Direct vs Indirect Labor last 7 days
  - Pending Service Request's by Session Location (*uses the logged in User's location to filter SRs)
- Motor Pool Module – The Motor Pool module allows for the setup of a motor pool asset types, rates by meter, duration (i.e., Day), etc. and allows for manual dispatching options.
- Motor Pool Reservations Module – The Reservations Module allows your customers to create, view and modify their motor pool reservations through a web-based portal. It also provides the option to email confirmation tickets to users requesting reservations. The Reservations Module improves efficiency by providing users with instant access to the information they need to streamline the reservation process.
  - **Motor Pool & Reservations Module Setup and Training Scope and Assumptions**
  - AssetWorks will provide remote professional services to setup and train on the motor pool module functionality and the Reservations module/portal for online reservations.
  - Setup and training agenda to include:
    - Motor Pool module setup and overview
      - Pool Vehicle Types
      - Operators
      - Calendars
      - Locations
      - Departments
      - Fleet Equipment
      - Creating a Motor Pool Reservation

        - Dispatching a Motor Pool Reservation
        - Returning a Motor Pool Reservation
        - Reservation Status Definitions
        - Printing a Reservation Confirmation
    - Reservations Module setup and overview
        - Creating a Motor Pool Reservation
        - Printing a Reservation Confirmation
- Reservations can also be made available in the SmartApps Reservations app if installed and setup; this project does not include SmartApps implementation however it is listed as an optional service for future consideration.
- AssetWorks will advise on Operator/Employee setup and work with the customer to train them on how to load this data.
- This project does not provide for any interfaces to keep Operators/Employees in sync with a 3rd party system or services to setup SSO (Single Sign On) unless specifically noted.

- MAXQueue Integration Module – The MAXQueue Designer is a tool that manages the MAXQueue integrations that have been created for a customer by AssetWorks. You can enable, disable, start and stop integrations, configure custom settings, name your MAXQueue instance and enable or disable data events. The MAXQueue Viewer is a tool that allows you to enable logging, view statistics about the performance of active workflows, and provide graphs that display the logging and statistics. Both tools are part of the MAXQueue integration module that is used for all custom and out of the box FleetFocus integrations. Customers are not able to use MAXQueue to develop their own integrations.
- Customer Access Module – The Customer Access Module is designed to provide maintenance department administrators with an easy to use, browser-based, real-time view into information regarding the vehicles and assets in their departments. It provides a link to enter service requests on vehicles, display assets assigned to the user's department, display open work orders for assets assigned to the user's department, and enter meter readings and usage tickets for assets.
- MobileFocus Enterprise - MobileFocus is a suite of software applications that allows integration of system applications with mobile devices. This makes the applications portable, enabling employees to access and update data related to work orders, asset meter readings, asset main records, part transactions, PMs and inspections and submit service requests from where the work occurs rather than "tied" to a PC or kiosk. Only the EDGE mobile platform is included for implementation within this SOW.
- Billing Module - The Billing Module is designed for review, adjustment and editing of transactions, for the purpose of billing out work order transactions, fuel transactions, end of the month charges, special fees, motor pool usage and more. A short overview will be given on this module and setup to support the Billing Module Output File Interface listed in the Technical Services section. The scope of services to setup this module is listed in the Technical Services section with the interface details.

Module system orientation sessions are approximately each 2 hours in length covering one or more of the topics listed above. AssetWorks maintains an "Application Design Guide (ADG)" (equivalent to the SDDD guide noted in the RFP) checklist covering System Setup and various configuration tasks and which also documents business decisions and application setup and configuration decisions for all in scope to be utilized. Utilizing that guide, AssetWorks will schedule sessions with WVDOT and recommend the types of resources required. An example screenshot of this document is located below.

Application Design Guide (ADG)



AssetWORKS

FleetFocus FA Project Implementation Guide
Customer: <INSERT NAME>

System Setup	Data Load Sequence	Session Number (2-4 Weeks)	Session Number (2-4 Months)	Functional Group	Screen Name	Key/Import	Current Business Process:	FleetFocus FA Setup Decision	Assignment Detail	Use Starter Database Values? (Ask, Modify, Remove, No Values)	Example Data in Starter Database? (Y/N)	Assignment Status	Responsible Resource	Baseline Due Date	Current Due Date	Data Load Import Template Number
1	16	1	1	Organization Structure	Locations	Key/Import					Y					
2	11	1	1	Organization Structure	Addresses	Key/Import				No Values	N					
3	13	1	1	Organization Structure	Departments	Import					Y					
4	10	1	1	Organization Structure	Calendars	Key					Y					
5	9	1	1	Organization Structure	Accounts	Import					Y					
6	19	2	4	Organization Structure	Employee - Primary Information	Key/Import				No Values	N					
7	26	2	4	Organization Structure	Operators – Primary Information	Import				No Values	N					

Basic Functionality | FA Web Portal Setup | Advanced Functionality | Optional Modules | Activity Log

In addition, AssetWorks will consult with WVDOT to configure the modules to facilitate the workflows for the maintenance and back-office functions. Configuration includes:

- Assigning user groups for specific functions
- Initializing (out of box) notifications to facilitate business processes
- Creating custom menus for specific user groups

Deliverables for System Configuration Services

- Setup configuration completed in the production database
- Production database available to re-fresh (database restore) the non-production database for customer review.
- Overview of all customer purchased modules and setup of those modules with decided workflows and processes from system setup consulting sessions.

WBS A.4.2 Data Conversion Services

Data Loading

AssetWorks will provide a training session for data loading for WVDOT administrators. A user with a solid understanding of Microsoft Excel will likely be able to grasp this tool and process very quickly. WVDOT staff will use the AssetWorks Data Loader tool to load its data into FleetFocus. Data loading tasks occur during the System Design and Configuration Services phase so that the project progresses naturally with items being taught and configured to encourage customer retention and engagement to meet project schedules.

Assist with Data Loads for Equipment, Parts and Summary Cost History

WVDOT will extract the agreed-upon data from its current systems and files (paper, PDFs, XLS, etc.) where it stores data to be converted. AssetWorks will consult with WVDOT on data "scrubbing" or "cleansing" legacy WVDOT data but will not be responsible for the final cleansed data. WVDOT will be responsible for populating FleetFocus with approved and "clean" WVDOT data.

AssetWorks will provide Microsoft Excel™ templates to assist in loading data into FleetFocus. WVDOT will convert only the data that maps into FleetFocus. Data that does not map into FleetFocus will not be converted. Further, only data elements that can be entered on a FleetFocus screen are part of this conversion. WVDOT, with assistance from AssetWorks, will use FleetFocus' data loading processing feature to load the data on these screens.

WVDOT will provide the data in the properly formatted spreadsheets (per AssetWorks' specification) for loading into FleetFocus. AssetWorks makes the following assumptions about the data from WVDOT's legacy system(s):

- The data files to be loaded into FleetFocus will be text-based flat files with one row of data per asset or per part.
- AssetWorks will not provide services to manipulate or move data from WVDOT files into AssetWorks provided data templates.
- WVDOT will provide the data to load into in the format of the data load files provided
- WVDOT will provide each test data file and each production data file in the same format.
- WVDOT will use default values for any data element that FleetFocus requires that is not in the data file.
- WVDOT will convert only master equipment records, master part records and summary cost history (summed totals of data by year and month) records.
- AssetWorks will convert only these fields for summary cost history (final data elements to be discussed with customer based on what historical work order data is being brought over so as not to duplicate cost data):
  - Fuel Quantity and Cost
  - Alternative Fuel and Cost
  - Repair Labor
  - Repair Parts
  - Repair Commercial Labor
  - Repair Commercial Parts
  - PM Labor
  - PM Parts
  - PM Commercial Labor
  - PM Commercial Parts
  - Meter Readings
  - Equipment Downtime hours
  - Fixed Monthly Costs – broken out to 7 fields
- AssetWorks will not provide services to load historical work order detail.
- AssetWorks will provide services to load the next PM due date and last meter PM performed information as part of this scope of work, shortly before going live.
- AssetWorks will not provide services to convert current open or historical purchase order or receipt detail from a legacy system.

- AssetWorks will assist in the form of troubleshooting errors in data load runs and providing direction in the mapping of legacy data elements to FleetFocus fields.
- AssetWorks will load a maximum of 3,600 fleet active assets as well as defined active components; active defined as the ability to write a work order for the asset or component.
- AssetWorks will load a maximum of 4 inventory locations with a maximum of 15,000 parts per inventory location. AssetWorks will review the 4 inventory location's data prior to load for data integrity purposes to ensure it supports application functionality however, the customer is responsible for the accuracy of the data such as descriptions, part numbers and prior to go live, the quantity on hand and current part price. After the initial 2 inventory locations are loaded, AssetWorks will train the customer on how to load additional inventory locations. The customer will be responsible for ensuring all parts in the data loads were loaded fully into the application and AssetWorks will assist in training on how to verify this using the application and various out of the box reports or ad hoc queries as required.
- All data loads by AssetWorks indicates two loads, one in test and one in production. After these two data loads, further data updates are to be updated manually in the FleetFocus system by the customer for incremental changes up to go live and cutover into a Production system. These data loads are typically done towards the end of the project and shortly before testing, training and go live to minimize any manual updates that might need to be done.
- There will be other data required to load as part of the project such as accounts, departments, operators, equipment classes, etc. and these will be loaded by WVDOT but with guidance from AssetWorks and after receiving data loader training from AssetWorks. This will help to ensure the WVDOT continues to learn the system and how the data loading process occurs for future system maintenance and updates.
- All data loads are to be reviewed by AssetWorks to ensure data is optimal before being loaded to the Production system before the go live cutover, even if WVDOT is loading the data.
- The customer will provide written sign off that they have tested the data conversion and agree it is ready to be run into a production environment; if there are issues encountered after sign-off and entry to production and additional professional services are required, a change order will be necessary.

Detailed Work Order History Conversion

The customer will extract their posted transactional work order history data from its current system(s). AssetWorks will consult with the customer on data "scrubbing/cleansing" legacy customer data but will not be responsible for the final cleansed data or the actual "scrubbing/cleansing" efforts. The customer will be responsible for populating FleetFocus with approved and "clean" customer data per FleetFocus standards such as conforming to field lengths and validations.

AssetWorks will provide Microsoft Excel™ templates to assist in loading data into FleetFocus. The customer will convert only the data that maps into FleetFocus. Data that does not map into FleetFocus will not be converted. Only data elements that can be entered on a FleetFocus screen are part of this conversion. The customer, with assistance from AssetWorks, will use FleetFocus' History Import Tool to load the data on these screens.

The customer will provide the data in the properly formatted spreadsheets (per AssetWorks' specification) for loading into FleetFocus. AssetWorks makes the following assumptions about the data from the customer's legacy system(s):

- The data loading tool requires network connectivity to a separately configured and connected FleetFocus Application.
- The data requires the following standards:

- The data files will be text-based flat files (CSV) with one row of data per transaction per work order.
- The customer will use default values for any data element(s) that FleetFocus requires that is not in the data files.
- The data will not include any commas in the data files as the import file format is in CSV.
- Only free form text (no HTML to be converted) will be mapped to the Notes field in FleetFocus.
- The customer will remove any "zero" cost rows before providing data.
- The data files will support reversal transactions for both labor and parts entries. Labor and parts reversal postings require a single line entry for the original posting and a secondary line entry for the reversal charge noted with a reversal flag.
- The data files will also support labor and part reversals as a single line item where the customer manually sums the positive number of the original and the reversal transaction amount and enters that as the final charge.
- All data must conform to the length and validation of FleetFocus fields (ex: EQ numbers are 20 characters).
- Dates need to be provided in a YYYY-MM-DD HH24:MI:SS or a YYYY-MM-DD format.
- All data must remove all special characters from the data since they will cause unexpected results in the application, such as:
  - Single quotes
  - Ampersands
  - Percent
  - Underscore
  - Forward slash
  - Plain text usage of characters such as < or > may be interpreted by the browser as HTML tags and could be considered a security risk.
  - Character sets that are not 8-bit.
  - Accepted characters are A-Z, 0-9, hyphen (-), period (.), and space ( ).

- Only posted transactional work order history will be converted for labor, parts and commercial line items; pm or inspection checklist detail or test results will not be converted, only the labor and parts associated with the high level pm or inspection task.
- The customer will provide each test and production data file in exactly the same format.
- The customer will work with AssetWorks to run the files into a non-production environment before running into a production environment but no more than one time into each environment notwithstanding adjusting and updating based on any errors produced during the loads.
- The customer will provide written sign off that they have tested the data conversion and agree it is ready to be run into a production environment; if there are issues encountered after sign-off and entry to production and additional professional services are required, a change order will be necessary.
- AssetWorks will work with the customer to convert only up to three of detailed work order history for active equipment; history on inactive, sold, or legacy equipment will not be converted. If additional years or amounts of data are requested, it will require a change order.
- AssetWorks will provide assistance in the form of troubleshooting errors in batch runs and providing direction in the mapping of legacy data elements to FleetFocus fields.

Conversion of Specific Data

AssetWorks and WVDOT will jointly resolve issues arising out of the data translation, including codes (if any) to be changed. AssetWorks will help WVDOT finalize the data mapping and identify the sources for each data element. WVDOT will be responsible for mapping old codes into new codes (i.e., translating) within the data set to be converted. All converted data must map to an existing data field in FleetFocus and adhere to the validation of that field and the overall FleetFocus application, as all data loaded goes through the application interface or authorized tool to ensure data integrity in the customer's new system.

Data Conversion Testing and Validation

After AssetWorks and WVDOT have jointly documented the data mapping and data load process, WVDOT will test the results from the data extractions. This process will require involvement from WVDOT Information Technology personnel supporting the existing systems.

Deliverables for Data Conversion Services

- One-time load of Fleet Equipment and Component data (adheres to limits listed above)
- One-time load of Parts Inventory data (adheres to limits listed above)
- One-time load of Summary Cost History (adheres to limits listed above)
- One-time load of three years of work order detail history (adheres to scope listed above)
- Delivery of data load training to customer system administration staff.

WBS A.4.3 Technical Services

Existing FleetFocus Integrations and Initiatives

AssetWorks will provide services to implement the following existing FleetFocus integrations. Services are to include setup in FleetFocus, installation of the integration, configuration in MAXQueue (proprietary middleware), testing in a non-production environment and rollout in a production environment. The following existing integrations have been included:

Existing Integration / Initiative Name	Functional Description
MobileFocus - EDGE	**MobileFocus EDGE Project Scope and Assumptions** • AssetWorks will provide services to install MobileFocus EDGE (EDGE) and perform base FleetFocus configuration to support EDGE as used by the customer as well as test the configuration. The module and integration assume usage of all EDGE settings out of the box and utilizes functionality built within supported versions, as noted in EDGE product documentation. The minimum version required for EDGE is v.20.1 for the Supervisor and Technician portals; additional portals will be added to future versions and noted in product documentation when released. • Assumes fleet assets are setup in FleetFocus and ready for configuration to support EDGE functionality. • EDGE does not currently support single sign on (SSO) methods. • Services for MobileFocus Fleet Connect, SmartApps and/or handheld devices are not included. • All services will be performed remotely using web teleconferencing, unless otherwise noted. • Training is delivered as "train the trainer" for system administrators; end user training is not included. Where applicable, standard training materials will be utilized. This area of the project does not include customized training materials.

Custom Interface Development

AssetWorks standard procedures for developing an interface include the following tasks:

- Create a preliminary specification which includes interface testing cases
- WVDOT project team reviews the preliminary specification
- AssetWorks updates the specification
- WVDOT project team provides final approval of the specification
- AssetWorks builds and unit tests interfaces on AssetWorks R&D servers before delivering the interfaces install package. The package is only delivered after the interface has passed the AssetWorks QA process.
- AssetWorks and WVDOT incorporate interface into the test environment
- AssetWorks and WVDOT perform integration testing of the interface
- WVDOT installs interface once testing is complete



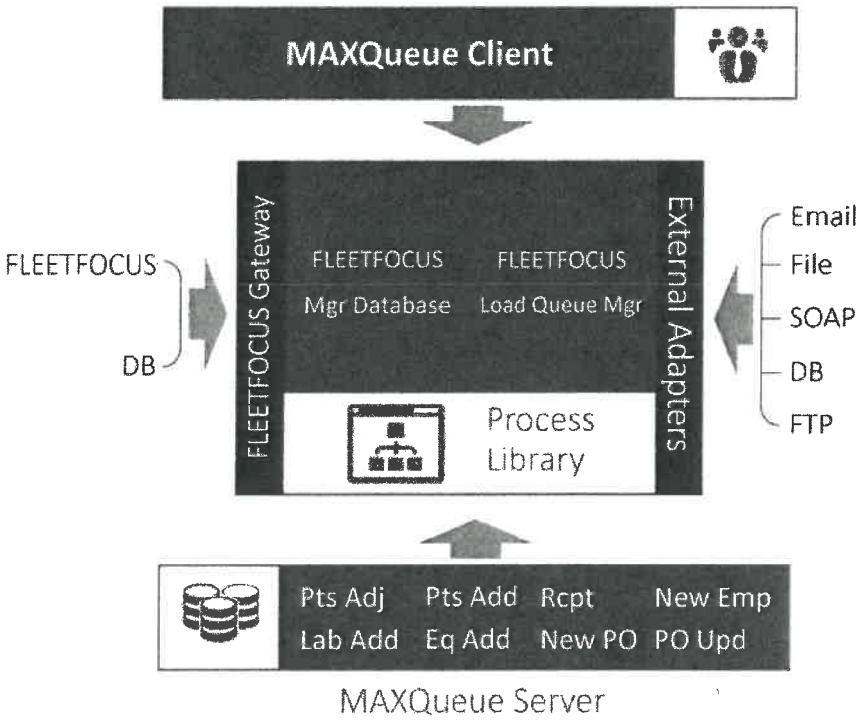
- AssetWorks Professional Services provides logs of interfaces in the test environment to AssetWorks Support for review and acceptance.
- AssetWorks Support approves the logs and approves for WVDOT to move the interface into the Production environment.
- AssetWorks Support provides ongoing assistance for the interface based on the approved specification design, if anything is requested outside of that specification design and once the interface is in Production a change order will be requested.

AssetWorks will provide interface planning services to develop a roadmap for the integration between FleetFocus and WVDOT's other systems, as described below. The project team will discuss and specify the data elements required, the time of the exchange, and the method of data exchange. AssetWorks and the project team will develop a mutually acceptable plan and schedule for the work to be completed and identify the resources and timeframe required for the efforts. AssetWorks assumes WVDOT will involve the appropriate staff to reach consensus and decisions on all interface specifications during the discussion and according to the proposed timeline.

When interfacing to applications such as Enterprise Resource Planning (ERP) systems, AssetWorks makes use of XML (eXtensible Markup Language) data streams. Using XML, external applications access MAXQueue, the FleetFocus integration module, to interact directly with the FleetFocus components in real-time, applying all the standard FleetFocus business rules and processing logic. This has the same effect on the data as if it was manually keyed into a standard FleetFocus page.

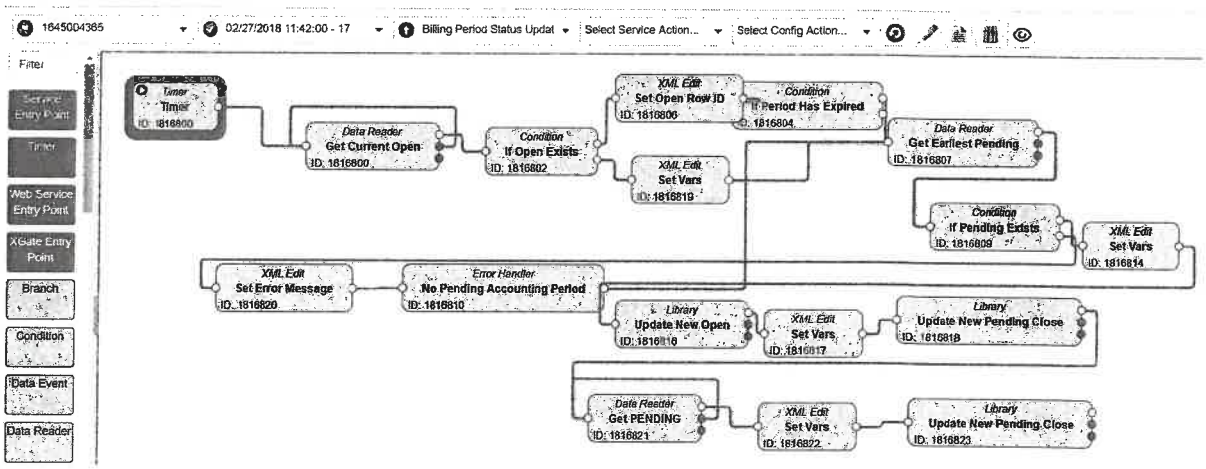
AssetWorks can create an on-demand or scheduled batch interface that uses text files to update or extract records in FleetFocus. When FleetFocus has been interfaced to export data to flat file legacy systems, programs are created that insert rows into the target transaction file. In some cases, intermediary staging tables are used in lieu of file transfers. Using MAXQueue, users can setup recurring schedules to execute individual interfaces. For inbound batch integrations, FleetFocus looks in a standard file directory or to a staging table for incoming data. When data is found, FleetFocus processes the data through MAXQueue in the same manner as the real-time interfaces. For outbound data, when the interface is executed, AssetWorks extracts the data into either a data file or a staging table.

In general, MAXQueue supports a wide range of communication methods and protocols and the ability for different topic subscribers to use different protocols and processes (example: a real-time purchasing interface connecting to a SOAP (Service Oriented Architecture Protocol) server and pulling down XML documents, side-by-side with a batch-driven interface that uses FTP (File Transfer Protocol) to pass a formatted text file). MAXQueue is a separate module from the base application of FleetFocus, allowing it to be installed in a customer's DMZ (if preferred, but not required), allowing communication between internal databases and external vendor systems without compromising network security.



MAXQueue includes a user interface which may allow interfaces to be configured by customers and typically provides the customer with the flexibility to control when and how often interfaces are processed.

When a business event occurs in an AssetWorks product or in the external system, the other product receives pertinent data for further processing, storage, or both. Typically, the data has been completely processed in the initiating product before being passed and it is simply stored in the receiving product for reference purposes.



AssetWorks has is proposing the following interfaces with WVDOT's other enterprise systems. For each of the following scenarios, AssetWorks has provided the proposed workflow or interface. These recommendations are based on our experience, and best practices for maintenance system integration.

AssetWorks is willing to discuss alternative, more (or less) extensive integration options and designs with WVDOT to ensure the optimum solution. However, for the basis of this SOW, the following assumptions and designs have been incorporated as the basis for the pricing provided. The project team will define a detailed specification for each interface before any development work begins. Milestones are to be billed upon delivery of specifications and/or delivery of the custom deliverable(s) as noted in the milestone names, with the amounts noted on the full milestone schedule.

#	Interface Name	Functional Description
1	**CAM - CAM Requisition to wvOASIS Advantage Financials Interface**	CAM to originate the requisition order to purchase equipment. On an application level defined trigger, the requisition is to be sent to wvOASIS Advantage Financials (wvOASIS) to be routed internally for review and approval. Assumes one asset per CAM requisition order and no budget checks on available funds in wvOASIS. This is a one-way interface from CAM to wvOASIS. Interface 1, 2 and 3 are considered a set and must be developed together. Web services can be utilized for this interface as the data exchange method.
2	**CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface**	wvOASIS Advantage Financials to turn approved requisition into an approved purchase order that will be a reference to the CAM requisition order. wvOASIS to send the approved purchase order back to CAM to close out the requisition and open the new purchase order in CAM to await the goods receipt. Assumes one asset per wvOASIS purchase order. This is a one-way interface from wvOASIS to CAM. Interface 1, 2 and 3 are considered a set and must be

#	Interface Name	Functional Description
		developed together. Web services can be utilized for this interface as the data exchange method.
3	**CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface**	Upon acceptance of the delivered asset (equipment), a goods receipt is done on the open Purchase Order in CAM and is sent to wvOASIS. wvOASIS to utilize this goods receipt to pay the vendor who provided the accepted equipment. CAM is not an invoicing system; this is expected to be done in wvOASIS. This is a one-way interface from CAM to wvOASIS. Interface 1, 2 and 3 are considered a set and must be developed together. Web services can be utilized for this interface as the data exchange method.
4	**FA - Asset Create Interface - wvOASIS Advantage Financials to FA**	Customer's external system will be the system of record for the creation, update and disposal of equipment and assets. This info will push to FA and is required to send all data which FA requires for creation of an Asset, with the assumption that some fields will be variables within the interface (vars.DefaultRequiredData1, etc.) or set of External Data Mapping for up to 5 fields if they cannot be sent from external system. This interface will only create Assets of type VEHICLE (no other asset types, no Components) nor will interface create any supporting additional data, such as Departments), and will only write to 1 table (EQ_MAIN) not create any Supporting data in Additional tables (EQ_MAIN.ADDL). Any required supporting data which needs to be synced to a second table will require a change of scope. Otherwise, all supporting data must be pre-set to the system tables prior to sync, or manually added during an Error processing queue review, and re-synced. If the data is required and does not exist (or is part of default data set, which must be written into specification during scoping with AssetWorks), the interface will send an Error message. *Assumptions*: Create and Update Asset Interface: if the Asset ID already exists, the data will be updated on the Asset following same rules/requirements. Asset ID cannot be changed, only created as it is the interface's primary key. If the workflows in any other "Create and Update Asset Interfaces" are timed simultaneously, the data will be loaded and updated based on the time of sync. One-way from Customer external system IN to AssetWorks FleetFocus FA.

#	Interface Name	Functional Description
5	**FA - Asset Create/Update Interface - FA to BRIM**	○ FleetFocus will be the system of record, and any creation of data will be output utilizing a standard MAXQueue method, which the external system must support. • AssetWorks will provide the services to specify and build an asset outbound interface to send new and updated assets in FleetFocus FA to Fuel master. Fuel Master will provide the services to accept the data to either create or update the asset data in their external system. • Assumes a one-way direction from FleetFocus FA to Fuel Master. • Assumes that up to 10-20 fields will be used on the Fleet Equipment screen; assumes the ability to send the Operator ID and Operator Name as part of these fields. • Assumes only Fleet Assets and not Components. • Assumes the data sent will include all data fields for active only assets determined as part of the specification process; specification will include any specific life cycle status codes (specifies is retired, etc.) that the customer would like to exclude as part of the data extract. • Assumes all data is sent each time and not incremental changes of the data since the last time the data was sent. New asset data will not be flagged as new but rather just included with the overall data set for the external system to determine if the data is new and to be created vs updated. • Data will be exported from FleetFocus FA in one export format and as a flat file. • All error processing of data is to be handled by the external (IN) system. • This interface will send all Creation and Update of data on a timed basis, the timer is configurable. The external system will process and handle the rules for updates. • One-way from FleetFocus FA OUT to Customer external system. • If the workflows in any other "Create and Update Asset Interfaces" are timed simultaneously, the data will be loaded and updated based on the time of sync.
6	**FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials**	One way from FA to OASIS for Work Order and Tasks - FA is the system of record for creation and status of Work Order. Workflow: All work orders should be created (and PM work can be generated using MAXQueue module) in a "Staged" status to reduce data outputs, as upon OPEN will be the trigger for send of data to OASIS. FleetFocus will send data upon creation if in OPEN status, or OPEN status change, but also: * Any new task added to a WO will be sent if one is added/appended. * Work order line updates to the tasks will be sent only for identified critical data (quoted to include 2-3 fields for updates only) such as Account ID. Updates

#	Interface Name	Functional Description
		will not be sent for Work-related updates, such as Work Accomplished codes and Notes. * Asset ID change on a Work Order is not supported, if customer incorrectly creates work order, must be closed and a new one reopened. * Status updates on Work order header will not be sent (such as change to WORK FINISH status) other than upon Final CLOSE status, as this is the signal for the external system to no longer allow charging to these tasks. * Task deletions will not be allowed. No additional data is included: Data will be sent from Work Order Header and Work order Line task tables, and any further lookups or additional data to send will require a change of scope. All supporting data must be pre-set to the FleetFocus system tables prior to sync, or manually added during an Error processing queue review, and re-synced. If the data is required and does not exist (or is part of default data set, which must be written into specification during scoping with AssetWorks), the interface will send an Error message which will need to be manually reviewed. This is assumed Create and Update interface: if the Asset ID already exists, the data will be updated on the Asset following same rules/requirements. Asset ID cannot be changed, only created as it is the interface's primary Key.
7	**FA - Labor output from wvOASIS to FA for purpose of outputting Billing**	One-way from Customer external system IN to AssetWorks FleetFocus FA. Into FA for Time data related to the work from interface named "Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials" - this interface is dependent upon that item and cannot be completed without, or a scope adjustment would be required. After the information is sent out of FleetFocus FA to OASIS, users log work in OASIS outside of FleetFocus FA using the HRM workflows. This is managed by the customer. They log time Program, Activity etc. tied to the Work Order ID + Task ID from data sent from FleetFocus FA. (in Advantage), for purposes of HR tracking.

#	Interface Name	Functional Description
		Upon a trigger defined by customer in external system, they will send Time data (Labor hours for each task back to FleetFocus FA) utilizing a supported method, which will create an enter into the Time Card entry data to track the time and subsequently then using standard FA methods, calculate cost data. FleetFocus FA which will be the system of record for asset and work historical costs, and this interface only sends hours. It will send data to one area only (Time tracking screen) within FleetFocus FA. No updates, only create of a new line upon each send is supported. If any data sent for the work order sent outside of data requirements such as: Needed but missing supporting data, or data sent after work order CLOSE, an error will be generated. The reopen Work Orders workflow is not included into the workflow (this interface will not reopen a work order), and if used would require a manual adjustment for errors. The external system is required to send all data which FA requires for creation of the Time entry, not limited to but including the Employee ID stored within FleetFocus FA, with the assumption that some fields will be variables within the interface (vars.DefaultRequiredData1, etc.) or set of External Data Mapping for up to 5 fields if they cannot be sent from external system. It is the responsibility of the customer's external system to tie the proper ID matches for needed keys (Employee ID + Work Order + Task ID) to link the data required, or errors will be generated within FleetFocus FA which must be manually managed by the customer's appointed administrator.
8	**FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA**	Customer's external system will be the system of record for the creation and tracking of vehicle usage data. This info will push to FA and is required to send all data which FA requires for creation of a vehicle Usage ticket, with the assumption that some fields will be variables within the interface (vars.DefaultRequiredData1, etc.) or set of External Data Mapping for up to 5 fields if they cannot be sent from external system. All data sent is for the creation of the ticket only and subsequently will use standard FA methods to calculate cost data based on rates set at an equipment class level. This interface will only create Usage Tickets. No update is available. Any required supporting data which needs to be synced to a second table will require a change of scope. Otherwise, all supporting data must be pre-set to the system tables prior to sync, or manually added during an Error processing queue review, and re-synced.

#	Interface Name	Functional Description
		If the data is required and does not exist (or is part of default data set, which must be written into specification during scoping with AssetWorks), the interface will send an Error message. This is assumed Create only interface. Usage ticket ID is generated within FleetFocus FA and cannot be manually entered. One-way from Customer external system IN to AssetWorks FleetFocus FA.
9	**FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface**	AssetWorks will provide professional services to build a part master, inventory sync and parts issues/returns interface. The customer's ERP system is the system of record for all parts master records. Within FleetFocus FA, parts will be created and/or maintained via the interface. The interface will transfer part and inventory information from the ERP system to FleetFocus FA to facilitate Parts actions against work orders. To accomplish this, AssetWorks will utilize the following interface flows: 1. Part Master interface - ERP to FleetFocus FA (one-way) 2. Inventory Sync interface - ERP to FleetFocus FA (one-way) 3. Parts Issue & Returns interface – FleetFocus FA to ERP (one-way) 4. Parts – Stock Transfer – FleetFocus FA to ERP (one-way) Inventory will be available in both FleetFocus FA and ERP with the ERP being the system of record transferring data to FleetFocus FA. The customer will be responsible for making this information available via the agreed interface method (i.e., Staging Table, flat file, web services, etc.) in the AssetWorks-specified standard format. Part Master & Inventory Sync Interface ERP to FleetFocus FA: • ERP is system of record for parts and all new parts are created in ERP with info then moving into FleetFocus FA. All parts regardless of stock or non-stock are to be interfaced. Any part fields coming from the ERP cannot be changed in FleetFocus FA. Only FleetFocus FA specific fields (i.e., Vendor warranty info) that do not match back to the ERP can be changed in FleetFocus FA. • ERP is system of record for inventory quantities on hand and average prices; ERP will send down the new quantity and current price and FleetFocus FA will accept it as is and override what is in FleetFocus FA. It is assumed that inventory counts, and transfers happen in ERP. • Sync is an after-the-fact adjustment, one-way, sent from ERP to FleetFocus FA.

#	Interface Name	Functional Description
		• Processing load should take into consideration for number to records that will require updating to not impact performance during peak hours. • Interface updates will include both new and existing parts. Interface will check if part exists, and if not found will create Part Primary and Part Location records. • Interface needs to process data during a timeframe that will prevent the data being processed to become outdated within each system, utilizing ERP and FleetFocus FA processing. • Interface timing needs to be set to allow for part master records to be created on a timely basis or a part issue or return cannot occur until the part master record is created. Parts Issues & Return Interface FleetFocus FA to ERP: • FleetFocus FA is the system of record for all parts issues and returns (return to the storeroom, not vendor) whether on a work order or as a direct issue and will be sent one way from FleetFocus to FA. Returns will be sent as a reversal flag transaction. Part Master / Inventory Sync / Part Issues & Returns Interface Assumptions: • Inventory Sync will be one way into FleetFocus FA from ERP creating records on Parts – Adjustments and/or Parts Primary and Location records as necessary for creation of an inventory adjustment. • Interface includes 1-2 simple data rules such as (formatting of fields with concatenation). • The customer will be responsible for making this information available via the agreed interface method (i.e., Staging Table, flat file, web services, etc.) in the AssetWorks-specified standard format. • Any item with an Inventory Location ID that does not exist in FleetFocus FA or any other required data which does not exist, will error to MAXQueue Error handler; all standard system validations apply and (invalid number format for quantity, etc.) will be required to be processed manually via the MAXQueue handler. • Any part master item that comes from the ERP without a keyword, product category, part classification, unit of measure and/or bin location will error to MAXQueue Error handler; all standard system validations apply and (invalid number format for quantity, etc.) will be required to be processed manually via the MAXQueue handler. • Any part master item that comes from the ERP with a keyword, product category, part classification, unit of measure and/or bin location that does not exist in FleetFocus FA, will error to MAXQueue Error handler; all standard system

#	Interface Name	Functional Description
		validations apply and (invalid number format for quantity, etc.) will be required to be processed manually via the MAXQueue handler. These code lists need to be kept up to date manually between the two systems. • Any part master item required by FleetFocus FA that does not exist in ERP will be defaulted to a single code pre-determined code as part of the technical and functional specifications. • This interface does not cover the use of the "To be reconciled" tab on the Parts Adjustment screen in FleetFocus FA. • This interface does not cover the use of lot numbers as relates to LIFO/FIFO. The interface assumes that "Average" pricing is in effect on the Parts: Setup: Options screen in FleetFocus FA. This interface does not cover the use Part Rebuilds that may increment in inventory in FleetFocus FA; if required it will necessitate a manual adjustment in the ERP system. • This interface does not cover serialized parts or track serial numbers. • This interface does not include ongoing updates to existing Parts Primary and Parts location information such as description changes, other than what is applied to the Parts Adjustment screen noted above such as quantity and price, etc.
10	**FA - Asset Create/Update Interface - FA to Fuel Master**	○ FleetFocus will be the system of record, and any creation of data will be output utilizing a standard MAXQueue method, which the external system must support. • AssetWorks will provide the services to specify and build an asset outbound interface to send new and updated assets in FleetFocus FA to Fuel master. Fuel Master will provide the services to accept the data to either create or update the asset data in their external system. • Assumes a one-way direction from FleetFocus FA to Fuel Master. • Assumes that up to 10-20 fields will be used on the Fleet Equipment screen; assumes the ability to send the Operator ID and Operator Name as part of these fields. • Assumes only Fleet Assets and not Components. • Assumes the data sent will include all data fields for active only assets determined as part of the specification process; specification will include any specific life cycle status codes (specifies is retired, etc.) that the customer would like to exclude as part of the data extract. • Assumes all data is sent each time and not incremental changes of the data since the last time the data was sent. New asset data will not be flagged as new but rather just included with the overall data set for the external system to determine if the data is new and to be created vs updated. • Data will be exported from FleetFocus FA in one export format and as a flat file. • All error processing of data is to be handled by the external (IN) system.

#	Interface Name	Functional Description
		• This interface will send all Creation and Update of data on a timed basis, the timer is configurable. The external system will process and handle the rules for updates. • One-way from FleetFocus FA OUT to Customer external system. • If the workflows in any other "Create and Update Asset Interfaces" are timed simultaneously, the data will be loaded and updated based on the time of sync.
11	**FA - External Fuel Interface - Fuel Master to FA**	AssetWorks will provide services to build and process a fuel interface for Fuel Master into FleetFocus FA (FA). The interface will expect a single flat file that contains all fuel data across the organization. The File will be loaded to a shared location or FTP location for AssetWorks (if FTP location, a login must be granted with read/write permissions) to pick up for processing and then archiving/file deletion. One file format is required across the organization with one agreed upon overall data mapping from Fuel Master to FA fields. Data sent in the file is required to contain appropriate information to enter or lookup FA specific code data such as employee/operator ID, etc. Mapping will be able to be configured only for Fuel Types, but must apply generically across all files, or be unique across all, in that the data can only link to one code within FleetFocus. Example: File(s) can contain "UNL" and "UN" both which map to FleetFocus FA's fuel code of "UN" for unleaded. But the values of "UN" within the files cannot be mapped to two different values within FleetFocus FA; there must only be one fuel type that "UN" or "UNL" matches. Utilizing only a flat file, the interface will go one direction from Fuel Master to FleetFocus FA to create fuel tickets on either the External or Internal Fuel Ticket screen (dependent on the fields utilized) with a maximum of ten (10) fields being sent per fuel ticket line. Basic fields for inclusion in a fuel ticket assumes the following to be sent within the file: o Date/Time o Meter (at time of fueling) o Equipment ID (must match FA ID or match to an associated fuel card ID on fleet equipment record) o Fuel Type o Quantity o Total Price • The interface will only process fuel items; fluids or other product IDs (car wash, etc.) are not included in this quote.

#	Interface Name	Functional Description
		• The interface will not include update to the operator/employees records with any inserts, updates or deletes of those data records. • The rules for all locations/departments and configurations will be the same, aside from given outlined mapping ability noted above. If other different rules are needed, a requote will be required.
12	**FA - Asset Create/Update and Work History on Asset - DOA to FA**	**Interface Workflow 1** = Create and Update Asset Interface *Direction*: One-way from Customer external system IN to AssetWorks FleetFocus. Customer's external DOA system will be the system of record for the creation, update and disposal of equipment and assets. This info will push to FA and is required to send all data which FA requires for creation of an Asset, with the assumption that some fields will be variables within the interface (vars.DefaultRequiredData1, etc.) or set of External Data Mapping for up to 5 fields if these cannot be sent from the DOA external system. This interface will only create Assets of type VEHICLE (no other asset types, no Components) nor will interface create any supporting additional data, such as Departments). The interface will only write to 1 table (EQ_MAIN) not create any supporting data in additional tables (EQ_MAIN.ADDL). Any required supporting data which needs to be synced to a second table will require a change of scope. Otherwise, all supporting data must be pre-set to the system tables prior to sync, or manually added during an Error processing queue review, and re-synced. If the data is required and does not exist (or is part of a default data set, which must be written into specification during scoping with AssetWorks), the interface will send an error message. *Assumptions*: Create and Update Asset Interface: if the Asset ID already exists, the data will be updated on the Asset following same rules/requirements. Asset ID cannot be changed, only created as it is the interface's primary key. If the workflows in any other "Create and Update Asset Interfaces" are timed simultaneously, the data will be loaded and updated based on the time of sync. --- **Interface Workflow 2** = Send Direct Charge Data for History

#	Interface Name	Functional Description
		Direction: One-way from Customer external system IN to AssetWorks FleetFocus. Customer's external DOA system will be the system of record for the Direct charges for tracking costs performed on equipment and assets. This info will push to FA and is required to send all data which FA requires for creation of a Direct charges (no Work Order in FleetFocus FA is required) of historical information, with the assumption that some fields will be variables within the interface (vars.DefaultRequiredData1, etc.) or set of External Data Mapping for up to 5 fields if they cannot be sent from external system. This interface assumes that all data will be pushed to the Direct Charges - No Work Order - Commercial screen. Though not to the work order screen, this data will be available to view when reviewing an asset's history if working on a work order in the FleetFocus system. One-way from Customer external system IN to AssetWorks FleetFocus FA.
13	**FA - Billing Module Output Interface File - FA to DOA**	**Billing Module Implementation Scope and Assumptions** AssetWorks will provide services to implement the Billing Module in FleetFocus and provide technical and functional support for out of the box application functionality. AssetWorks will also install a MAXQueue package, configure module settings, setup billing types, test, train, and support remotely. Billing Module includes transactions for assets for the following items in FleetFocus: work order (labor, parts, commercial) charges, fuel, direct issues (labor, parts, commercial), recurring charges (depreciation, insurance, lease expense, licensing, monthly, other fixed 1, other fixed 2, other fixed 3, replacement), motor pool, special fees, base usage (base rate end of period usage charges), and usage ticket charges. All these items expect to use FleetFocus FA standard fields and functionality and does not consider re-purposed data fields or functionality being used in an unintended manner within FleetFocus. The Billing module does not include any transactions prior to turning on the interface in MAXQueue. Billing Module only bills transactional line items and does not bill based on the header status (ex: closed) of a work order. This allows for greater flexibility in gathering charges regardless of status or a re-open of a work order. All transactions that are set to bill on an asset based on the billing type associated with that asset will automatically be added to additional tables in the application which are separate from the main tables for data. This is in the event the customer wants to manipulate a charge before billing is run and allows for different billing per asset if required per the customer defined billing

#	Interface Name	Functional Description
		types. The transactions are automatically added to customer defined "periods" in the application and can be used by an interface for seamless billing. If the Customer chooses to not bill a certain transaction in a period, they are able to manually move out any transactions that should not billed from the current period to the next accounting period; this is not a common occurrence but can be helpful based on various situations. Then the current period can be locked to ensure no new transactions go into that period once billed and customers can bill the new and/or moved transactions later or continue to move transactions from period to period as needed. • Billing Module only supports line-item percentage markups. • Billing Module does not support Work Order header overhead costs or small parts markups. • Billing Module is not location based but rather by account or department in terms of rollups and viewing transactions within a specified period. Training assumes a train-the-trainer approach for system administrators and where applicable, standard training materials will be utilized; scope does not include customized training materials. Training will include module functions, workflows and an overview of the out of the box Billing Module reports. **Billing Module File Output Interface Scope and Assumptions** AssetWorks will provide the services to develop a billing output (contains all fuel and work order transactions (labor, parts, commercial) to share historical data with DOA) with the customer's DOA system. The interface assumes a one-way send of transactional data from FleetFocus to DOA on FleetFocus status change for periods setup in the AssetWorks Billing Module. Once the status change is made for a Billing Module period, MAXQueue will poll for that change on a customer defined timer to send the data as needed, such as monthly (trigger defined in final business process workflows with AssetWorks.) and include transactions posted in that period for use in upload to the DOA system and not in a Crystal report format. The interface assumes a standard FleetFocus billing process with workflow setup in the AssetWorks' Billing Module (see scope and assumptions for separate Billing Module Implementation Services). Output will only include data available in the tables populated by the billing module (all tables starting with



#	Interface Name	Functional Description
		"ACCT_") and assumes there is no additional rules outside of the base FleetFocus application logic and basic rollup or tallying for transactions (group by Account, Work Order or Department, etc.). The customer will provide the services to have the DOA system load and process the data. If any other data or custom processes are to be included in the file a re-quote will be needed. Assumes more advanced filtering for leased assets, so to include that data can be filtered out to send from a specific set of rules (such as Departmental for DOA). Filtering output must be utilizing the standard features within the FleetFocus FA billing module, or scope adjustment will be required. The interface will create a custom flat file output (format is to be determined) to be sent to a shared network drive or FTP site from which the customer's billing application will process the file.
14	**FA - Accounts Interface - wvOASIS to FA (Optional)**	AssetWorks will provide services to build an interface to accept account codes from the customer's ERP financial external system for the purposes of keeping accounts codes in sync between FleetFocus and the ERP. The customer will provide the services to have the external system send insert, update, and deactivate transactions for relevant account codes. This interface is a one-way direction, from the customer's ERP to FleetFocus to update the Accounts Primary screen in FleetFocus. All standard validations apply for the use of account codes. The customer will define the relevant account records and structure (i.e., project task code string) and use some differentiator to identify which record changes will be passed to FleetFocus through this interface. AssetWorks will provide the services to process these records and update the Fleet Focus Account table. The interface will not connect or communicate direction with the customer's financial system. Assumptions o One-way interface in-bound to FleetFocus from customer's ERP financial system. o Interface assumes a maximum of 10-20 fields being sent to one screen/table in FleetFocus for incoming accounts. o Interface includes 1-2 simple data rules such as (formatting of fields with concatenation). o The interface will make use of a flat file (ex: CSV) o This interface is only creating or changing items in the FleetFocus Accounts table, no other tables or areas will be updated. No other data will be created or updated.

#	Interface Name	Functional Description
15	**FA - Vendors Interface - wvOASIS to FA (Optional)**	AssetWorks will provide the services to specify and build a vendor interface to create/add and modify vendors in FleetFocus FA. The customer's ERP system will provide the services to send the vendor data to create or update in FleetFocus. • The interface will make use of a flat file (ex: CSV) • Assumes a one-way direction from the customer's ERP to FleetFocus • Assumes that up to 10-20 fields will be used on the Vendor Primary screen • This interface is only creating or changing items in the FleetFocus Vendors table, no other tables or areas will be updated. No other data will be created or updated.

WBS A.5.0 Train & Test

WBS A.5.1 Pre-Training Testing Services

Review Master Test Plan

As noted earlier, AssetWorks will first provide its standard FleetFocus test plan in addition to the finalized requirements traceability matrix and remove out workflows not to be used by the customer. WVDOT is responsible for any changes to the standard test plan. The test plan will consist of but not be limited to the following functional and data validation test cases:

- Add and modify equipment primary information
- Add and modify parts primary information
- Open a repair order and a PM order for an equipment unit
- Charge labor to the work orders and verify the charges of hours and costs
- Charge inventory parts to the work orders and verify the charges of quantity and cost as well as proper inventory relief
- Charge commercial charges to the work orders and verify the charges of labor and parts
- Close the repair and PM orders
- Verify work order charges (labor, parts and/or commercial services)
- Adjust parts inventory both upward and downward
- Click on and generate a standard Crystal reports
- Verify a sample of asset master records
- Verify a sample of part master records

Testing Methodology

AssetWorks organizes its user testing into functional groups and works with WVDOT to identify the appropriate internal group to participate in testing for their designated functional group(s). Prior to the testing sessions, AssetWorks will verify the security and access control functions for User Groups with WVDOT. Each WVDOT group will work through all test cases for a functional group in a single session and document the results. AssetWorks will provide up to 4 days of pre-testing training to support WVDOT utilizing the test plan and the traceability matrix established earlier in the project implementation. Pre-testing training will be given to up to 10 core project team users. Two implementation consultants are scoped for this one week onsite to provide extra support across the key project team and ensure that testing goes smoothly and quickly.

At the end of the testing session, all results are to be submitted by WVDOT to AssetWorks to review with WVDOT. This approach follows AssetWorks strong commitment to an on-going knowledge transfer methodology.

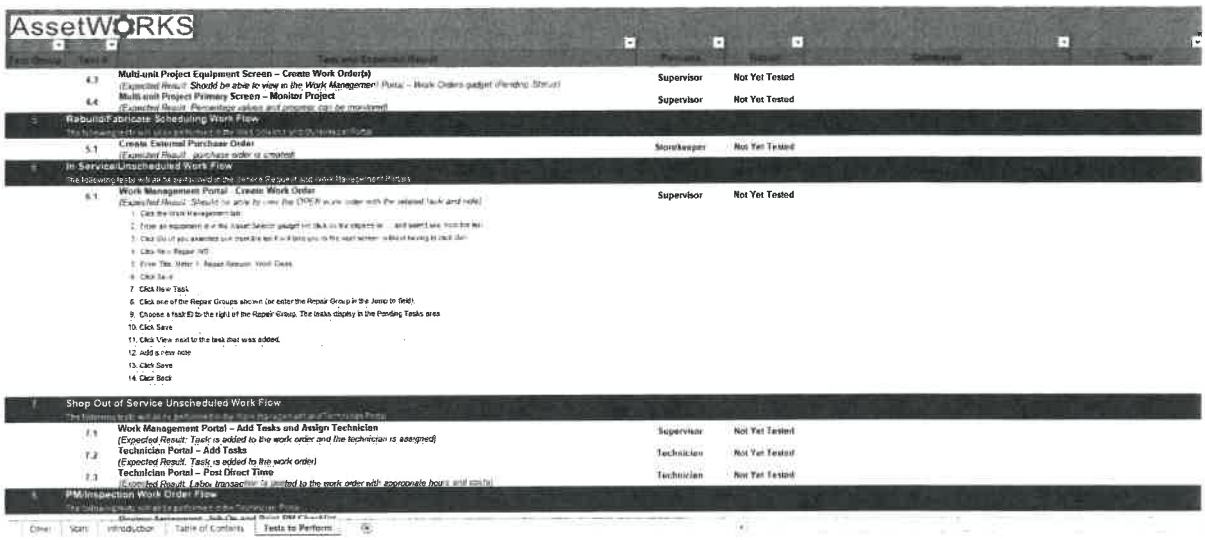
If a test case was unable to be completed, the cause will be determined, whether it is further training and/or additional configuration needed. If the failed result is not related to training or configuration, it will be submitted to AssetWorks Customer Care to be reviewed and resolved or passed to AssetWorks Product Management for further analysis. Depending on those results, it may require the customer to either upgrade immediately or in a future release and/or decide if the item is critical for the initial go live phase. The core WVDOT project team will make this decision with AssetWorks acting in an advisory role.

The test cases will be repeated until all cases are documented as passed, by each designated group at WVDOT for each relevant functional group as determined by project needs. Note that a project team may opt to not elect to use all core system functionality for the initial project launch. As such, the group will discuss, document, and agree to remove specific test cases in this even from the standard test plan.

All core functional groups are listed below but not limited to these example topics in associated testing areas:

1. Purchasing - replenishment, purchase orders, receipts
2. Asset Management - campaign/recalls, adding/modify equipment
3. Work Management - work orders, service requests, logging time, part requests
4. Materials Management - issuing parts, adding parts, inventory counts, inventory transfers

Testing Document Example:



Support System Test Plan Execution

AssetWorks will support the core WVDOT team as they test the FleetFocus system features to display the converted data in the test environment, according to the above standard test plan and methodology. The objective is to be able to run through the various testing scenarios, validate the data and system configuration, identify areas for adjustments, and facilitate retesting where needed. The WVDOT is required to complete the test plan as part of the knowledge transfer process but will be support by AssetWorks during this process.

This test plan will be executed according to the schedule agreed upon by WVDOT and AssetWorks during the project. AssetWorks will provide remote support for system testing for up to 10 days during this "Training Course Pilot". WVDOT will perform and document the test results within 30 days of receiving the finalized test scripts.

Testing Phase Reporting and Plans

- Security Plan – AssetWorks will provide a short plan to address the necessary areas of maintenance for the system administrator (i.e., security administrators) for ongoing activities such as user logs, table management and end of period, etc. These recommendations are specific to the system administrator

role within the context of FleetFocus only. There are no technical "security" recommendations as this proposal is for a SaaS implementation model.

- System Test Report – AssetWorks will compile the results of all testing (interfaces and core workflows) done within the context of the FleetFocus application and delivered to the customer.

- Integration Test Report – This testing occurs within each interface as it is individually unit tested. All interfaces and a description of testing for these interfaces is listed in WBS A.4.3 and the results will be compiled into a single report to be delivered to the WVDOT.

- Security Test Report – As this proposal is for a SaaS implementation of FleetFocus, AssetWorks has budgeted to formally request, retrieve and review this standard report (SOC2) with WVDOT on a quarterly basis throughout the duration of the project. The milestone for this report will be triggered one month after go-live. Pending NDA signature per RFP matrix response.

- Performance Test Report - As this proposal is for a SaaS implementation of FleetFocus, AssetWorks has budgeted to formally request, retrieve and review this standard report with WVDOT on a quarterly basis throughout the duration of the project. The milestone for this report will be triggered one month after go-live. Pending NDA signature per RFP matrix response.

- User Acceptance Test Report – the final results of the user acceptance testing for the core workflows of FleetFocus will be compiled and delivered to the customer.

Deliverable for Testing Services

- Deliver pre-training for core project team to be able to utilize user test scripts – one travel trip for two resources
- Deliver FleetFocus out of the box user test scripts to the customer
- Support the customer with questions as customer performs and documents test results
- Additional Overall Plans noted in "Testing Phase Reporting and Plans" – for each plan, the milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- Security Plan
- System Test Report
- Integration Test Report
- Security Test Report
- Performance Test Report
- User Acceptance Test Report

WBS A.5.2 Training Services

The training will be role-based and will differ for trainees from the various organizational and functional areas. Each WVDOT trainee will have the basic skills in the overall use of FleetFocus and strong knowledge of how to use the application in his or her specific job function or area of expertise. The deliverables will not include remedial training for computer skills or any computer-based training.

Training Overview

AssetWorks will provide up to 8 days (2 travel trips with one resource) of system administration and training in the configured base application and add-on modules for the roll-out of FleetFocus (according to the project plan) for up to ten users per class (assuming WVDOT's training facility has enough workstations for these training sessions). All training will be held at one central location or remotely as determined by the final agenda and project needs. The topics and workflows included in the training will be those finalized by WVDOT team during the system setup and follow-up tasks. However, WVDOT should remain especially sensitive to necessary last-minute procedural changes or clarifications based on trainee feedback.

Training Preparation

AssetWorks will provide its standard training plan at the start of the project with modifications to be made per the scope in A.1.1, standard training materials and begin scheduling and planning for the training. WVDOT is authorized to tailor the standard training materials to apply branding and match workflows specific to WVDOT. AssetWorks has included scope to remove out any areas that are not to be used and make small modifications to existing standard training materials. However, the changes are only to be made to the AssetWorks standard training materials provided for the classes listed below. If there are additional custom items are required to be created based on unique workflows or specific quick reference guides this will be reviewed against internal materials available first and if not available, will result in a change order.

AssetWorks training materials assume all users are familiar with a Windows environment; the AssetWorks training will not include any Windows or remedial computer training.

The training will cover work order functions; parts and labor posting functions; and other common features and transactions. The topics and workflows included in the training will be those finalized by WVDOT team during the system setup and follow-up tasks. Any deviations in the defined and agreed upon workflow will cause delays and added costs to the training.

AssetWorks will provide a master electronic version for WVDOT Project Manager. WVDOT will produce and provide copies (across all roles) of the final training materials for use during the training sessions. WVDOT will be authorized to reproduce and use any training materials for ongoing training within WVDOT.

Training Sample Schedule and Typical User Role Participation

Class ID	Class Name	Date	Time	Participants
FF101	Work Management Portal - Part 1	Day 1	8:00 am – 12:00 pm	Supervisor Service Writer

				Fleet Manager Admin Office
FF102	Work Management Portal - Part 2	Day 1	1:00 pm – 5:00 pm	Supervisor Service Writer Fleet Manager Admin Office
FF103	Technician Portal	Day 2	8:00 am – 12:00 pm	Technician Supervisor Fleet Manager
FF103	Technician Portal (*offered twice to ensure daily operations are properly maintained)	Day 2	1:00 pm – 5:00 pm	Technician Supervisor Fleet Manager
FF104	Storekeeper Portal	Day 3	8:00 am – 12:00 pm	Storekeeper Fleet Manager Admin Office
FF105	Enterprise Purchasing and Inventory Management	Day 3	1:00 pm – 5:00 pm	Storekeeper Fleet Manager Admin Office
FF106	Customer Access & Service Request Portals	Day 4	8:00 am – 10:00 pm	Fleet Manager Admin Office
FF107	Fleet Administrator and Equipment Management	Day 4	10:00 am – 12:00 pm	Supervisor Fleet Manager Admin Office
FF108	Reporting Portal	Day 4	1:00 pm – 3:00 pm	IT Fleet Manager Admin Office
FF109	AdHoc Query Portal	Day 4	3:00 pm – 5:00 pm	IT Fleet Manager Admin Office
FF110	Application Administrator	Remote	4 hours	IT Fleet Manager Admin Office

Training Courses

FF101 - Work Management Portal – Part 1

In this course, participants will learn how to use the FleetFocus Work Management portal to manage the daily operations within the maintenance areas. In hands-on exercises, participants will practice creating repair and PM work orders, directing employee assignments, accessing equipment work order history, managing service requests, generating shop schedules and multi-unit work orders, and executing reports. Training will cover the areas below and additional areas necessary to answer questions regarding shop operations.

- Work Management Portal overview
- Gadgets & Layout options
- Work Orders – Repair
- Equipment Due for PM/Inspection
- Work Orders – PM
- Work Order assignment
- Work Orders – Posting Charges *(after the fact)*
- Work Orders – Reviewing Charges
- Work Orders – Finishing/Closing
- Work Orders – Printing
- Work Order Summary
- Commercial Charges
- Parts Requests

FF102 - Work Management Portal – Part 2

In this course, participants will learn how to use the FleetFocus Work Management portal to manage the daily operations within the maintenance areas. In hands-on exercises, participants will practice creating repair and PM work orders, directing employee assignments, accessing equipment work order history, managing service requests, generating shop schedules and multi-unit work orders, and executing reports. Training will cover the areas below and additional areas necessary to answer questions regarding shop operations.

- Review of Maintenance Coding structures
  - PM class codes
  - PM checklist items
  - Task codes, etc.
- Filtering in the Work Management Portal
- Using the Asset Viewer
- Shop Calendar
- Employee Management
- Time Sheets
- Historical Costs
- Service Requests/Defects
- Generating Work Management Portal reports

- Work Order – Multi-unit *(as needed)*

FF103 - Technician Portal

In this course, participants will learn how to use the FleetFocus Technician portal as a maintenance tool to manage tasks they perform on a day-to-basis. In hands-on exercises, participants will practice accessing the system, clocking in and out, viewing work status and assignments, managing individual time reporting, posting time to work order tasks, changing/adding tasks to work orders, requesting parts, completing PM checklists, and creating service requests.

- Technician Portal overview
- Review of Critical Coding structures
  - Task codes
  - Work Accomplished Codes
  - Work Delay Codes
  - Priority Codes
- Technician Portal – Work Orders
  - Clock in and out
  - Using the Asset Viewer
  - View work status and assignments
  - Job on and off tasks *(real-time)*
  - View work order history
  - Find existing work orders
  - Putting work orders in delay
  - Work Order Main page and action buttons
  - Modify tasks
  - Request parts and commercial services
  - Add notes to work orders and tasks
  - Search for existing work orders
  - Work order postings *(after the fact)*
  - Complete PM checklist items *(as needed)*
  - Finish work order
  - View personal daily timesheet
  - Generating technical portal reports
- Technician Portal – Indirect time tracking

FF104 - Storekeeper Portal

In this course, participants will learn how to use the FleetFocus Storekeeper Portal as a tool to manage part transactions coming from the shop daily. In hands-on exercises, participants will practice issuing parts, cancelling part requests, creating new parts, ordering parts on a requisition or purchase order, receiving parts, and returning



parts to stock and a vendor.

- Enterprise Portal
  - System Operation & Navigation
  - Using the Filter to Search for Data
  - Part Primary
  - Part Location
  - Vendor/Part Information

- Storekeeper Portal
  - Overview
  - Part request management
  - Part request detail
  - Set Notify flag
  - Issue parts
  - Ordering from part requests
  - Purchase order management
  - Updating purchase orders
  - Creating purchase orders
  - Line-item overview
  - Receiving parts
  - Deleting lines on a purchase order
  - Returning parts to a vendor
  - Creating a new part
  - Editing an existing part
  - Direct Issues
  - Generating Storekeeper Portal reports

FF105 - Enterprise Purchasing and Inventory Management

In this course, participants will learn how to use FleetFocus to manage more complex areas of inventory management including enterprise purchasing setup, enterprise purchasing flows and replenishment management and inventory counts.

- Enterprise Purchasing Workflow
- Enterprise Purchasing codes
- Enterprise Portal
  - Inventory Replenishment
  - Cross References
  - Vendor Contracts
  - Historical Costs
  - Inventory Counts



- Generating Enterprise Purchasing reports

FF106 - Customer Access and Service Request Portals

In this course, participants will learn the basics of the FleetFocus Customer Access and the Service Request module. This module is used for end users outside of the asset maintenance operation to view equipment, update operators on assets, view open work orders on assets by department and enter in meter readings, service requests and usage tickets.

- View Assets
- Run Asset report
- Update Operators
- View Work Orders
- Run Work Orders report
- Enter Meter Readings
- Enter Service Requests
- Enter Usage Tickets

FF107 - Fleet Administrator and Equipment Management

In this course, participants will learn how to use FleetFocus for managing the master equipment records, defining technical specifications/subsystems and recording fuel information. In hands-on exercises, participants will practice entering new assets, entering, and updating subsystems and properties information, campaign management, accident tracking, and posting fuel records.

- Intro to FleetFocus
  - Enterprise Portal introduction
  - System Operation & Navigation
  - Using the Filter to Search for Data
- Fleet Equipment – Adding & Disposing assets
- Component - Adding/Disposing assets
- Component Relationships
- Assignment History
- Subsystems and Parts / Equipment Attributes
- Accident tracking
- Multi-Unit Projects & Recall Campaigns
- Historical Costs
- Equipment Renumbering
- Equipment Warranty
- Meter Readings – Assignments – Usage
- Fuel Management
  - Setting up assets for fueling
  - Internal Fuel Tickets
  - External Fuel Tickets

  - Automated Fuel Tickets
- Generating Equipment Management reports

FF108 - Reporting Portal

In this course, participants will learn the basics of reporting in the FleetFocus system. It will cover both how to run existing Crystal reports, add them to favorites, set filters, and schedule them. This training does not cover creating or modifying out of the box Crystal reports or any SQL language queries.

- Running Crystal Reports
- Scheduling Reports
- Exporting Reports

FF109 - AdHoc Query Portal

In this course, participants will learn the basics of reporting in the FleetFocus system. This session will cover the basics of the FleetFocus AdHoc Query module that allows an end user to create simple queries of data from the system. AssetWorks will review a sampling (3) of the created, out of the box ad hoc queries. AssetWorks will not create new customer specific custom reports during the class.

- Running Ad Hoc Reports
- Building Ad Hoc Reports

FF110 - Application Administrator

In this course, participants will learn the basics of managing the FleetFocus system from an application administrator perspective. It will cover adding and deactivating users, creating user groups, setting up UI controls, applying screen rights and viewing logs, setting up portals and general system admin rights as well as many other features.

- Admin Mode
  - UI Controls
  - Bulk Edit
- Control Rights
- Screen Rights
- Report Rights
- User Security
  - Options
  - Users
  - User Groups
- Employee & Operator – adding and disabling
- Table Management

- End of Period
- Activity Log
- Web Administration
    - Confirm Version
    - Health Check
    - System Logs
    - View Database Model
    - Adding and managing tabs / module types
        - Quick Links
        - Welcome
        - Announcements
        - Events
        - Contacts
- Web Modules Configuration
    - Web Module - Gadgets & Layout options (i.e., Work Management Portal, etc.)
    - Asset Profiles
- MAXQueue Designer Overview *(optional – pending project requirements)*

WVDOT will identify at least one "key user" on each shift to closely support the cutover, particularly after the training concludes. This individual will be responsible for answering initial end user questions and, most importantly, implementing subsequent changes or alterations to the documented procedures. AssetWorks recommends that these "key users" be those that attended the core team training sessions described above.

Deliverables for Training Services

- Deliver FleetFocus training agenda
- Deliver FleetFocus electronic standard training material
- Deliver FleetFocus training classes
    - FF101 - Work Management Portal – Part 1
    - FF102 – Work Management Portal – Part 2
    - FF103 – Technician Portal
    - FF104 – Storekeeper Portal
    - FF105 – Enterprise Purchasing and Inventory Management
    - FF106 – Customer Access and Service Request Portals
    - FF107 – Fleet Administrator and Equipment Management
    - FF108 – Reporting Portal
    - FF109 – AdHoc Query Portal
    - FF110 – Application Administrator

WBS A.6.0 Deployment

WBS A.6.1 Production Cut Over

Prepare Deployment Plan

- Enterprise Readiness Plan - AssetWorks will work with WVDOT to stage and prepare for the system roll-out/cutover. AssetWorks will deliver an Enterprise Readiness Plan that will be inclusive of the test plans passed, system areas configured, interfaces and their tested status and any relevant action items, issues, risks, decisions logged at that point and open support tickets for the WVDOT and AssetWorks to jointly review and make the final decision for go-live and the timeframe.

- Go-Live Deployment Plan - As part of this effort, AssetWorks will have worked with the WVDOT in WBS A.1.1 to prepare a Go-Live Deployment Plan to document the specific cutover steps, transition to operations within the new system, and a go-live checklist to verify that all items have been completed and the system is ready for production roll-out.

- Rollout of OCM Approved Materials- WVDOT to roll out completed and approved Organizational Change Management materials as listed in the scope in WBS A.1.1.

Cutover support

WVDOT will commence live operations using FleetFocus. AssetWorks staff will provide up to three weeks of a maximum of four business days of on-site "go live" assistance for WVDOT operation with a single Implementation Consultant each week. This step is critical to success.

During the initial deployment period, AssetWorks will provide support during normal working hours. When possible and agreed, AssetWorks will provide support to multiple shifts on a given day (e.g., by covering the last four hours of one shift and the first four hours of a second shift).

AssetWorks will remain closely involved during this very critical period. AssetWorks will have one resource on-site for the go live week. After the first week, AssetWorks will be onsite with one resource for an additional two weeks to deliver to answer questions and make sure the cut-over is progressing well.

After the first three weeks of go live AssetWorks will begin to transition WVDOT to our Customer Care department for follow up support and ticket management or earlier depending on the nature of the issue identified as well as the requested 26-week onsite period of post implementation support requested and priced as part of the RFP.

Deliverable for Deployment Services

- Delivery Go-Live Deployment Plan
- Customer begins use of FleetFocus in a live production operation

WBS A.6.1 Post Implementation Period

Post Implementation Support

Following the approved Post Go-Live Plan listed in WBS A.1.1, AssetWorks will provide an additional 26 weeks (maximum of three days per week for the onsite resource and to include 2 trips by the AssetWorks project manager as well as the 26 trips for the single implementation consultant) of onsite support and continued project management and project monitoring for WVDOT to continue to facilitate the successful implementation of the FleetFocus system and reinforce best practices. AssetWorks encourages a further discussion about the optimal schedule for this ongoing and onsite post implementation period.

Due to possible travel restrictions and ongoing customer projects, this will be staffed with varied resources but ones that will be given a high-level background on the project decisions and workflows chosen and will be sufficient to support WVDOT with remote support from internal AssetWorks groups depending on the nature of support required.

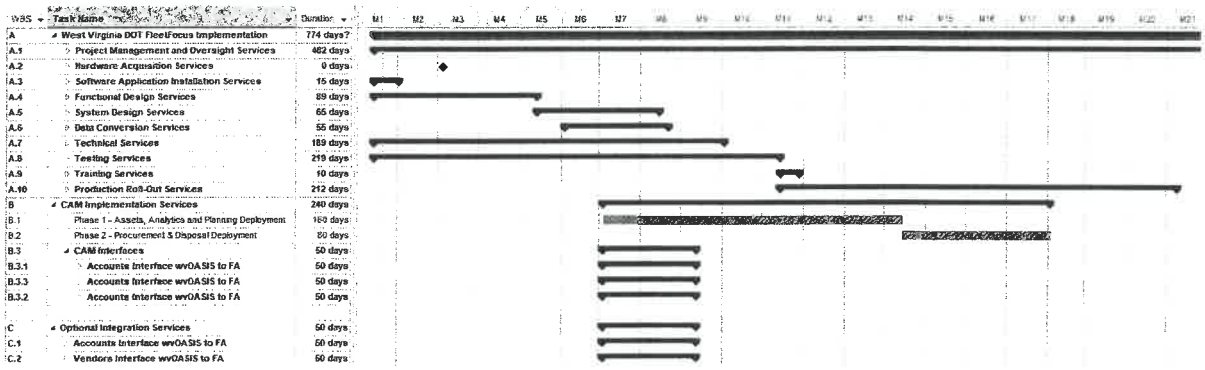
This post implementation support period is inclusive of scope listed in this SOW and does not include technical development (custom interface or notification specifications design or development) or custom report writing services without further assessment and/or a change order to define scope. It only includes on-going training and support of documented business decisions during the main project.

AssetWorks is open to a discussion regarding this post implementation period and that is either reduced to partial remote support or considered for a general reduction in scope to reduce the overall cost of this proposal.



FleetFocus Preliminary Schedule

AssetWorks proposes the following schedule to accomplish the tasks described below. This schedule is subject to change and dependent upon individual conditions and circumstances encountered during the project. AssetWorks will work with WVDOT's project team during project kick-off to finalize the project schedule, which might extend or reduce the timeline below. This timeline is inclusive of the CAM product as well as the extended post implementation period requested.



WBS	Task Name	Duration
A	West Virginia DOT FleetFocus Implementation	774 days?
A.1	Project Management and Oversight Services	482 days
A.2	Hardware Acquisition Services	0 days
A.3	Software Application Installation Services	15 days
A.4	Functional Design Services	89 days
A.5	System Design Services	65 days
A.6	Data Conversion Services	55 days
A.7	Technical Services	189 days
A.8	Testing Services	219 days
A.9	Training Services	10 days
A.10	Production Roll-Out Services	212 days
B	CAM Implementation Services	240 days
B.1	Phase 1 - Assets, Analytics and Planning Deployment	160 days
B.2	Phase 2 - Procurement & Disposal Deployment	80 days
B.3	CAM Interfaces	50 days
B.3.1	Accounts Interface wvOASIS to FA	50 days
B.3.3	Accounts Interface wvOASIS to FA	50 days
B.3.2	Accounts Interface wvOASIS to FA	50 days
C	Optional Integration Services	50 days
C.1	Accounts Interface wvOASIS to FA	50 days
C.2	Vendors Interface wvOASIS to FA	50 days

Project Initiation Timeline

Below is an outline of what to expect following an executed contract with AssetWorks for a FleetFocus project. Named AssetWorks resources are assigned after contract execution.

- Project assigned to an AssetWorks Project Manager – within one week after contract execution
- Installation of FleetFocus initiated - within one week after contract execution; earlier when possible.
- Project hand off call between AssetWorks Account Manager, WVDOT and AssetWorks Project Manager – within two weeks of PM assignment
- Project kick off meeting scheduled between AssetWorks Project Manager, Implementation Consultant and WVDOT - within two weeks after project hand off call.
- Initial system setup meeting between Implementation Consultant and WVDOT - within two weeks after project kick-off meeting or at a time mutually agreed upon by both parties.
- All other project execution activities follow the system setup sessions and will provided between the project plan and the Project Implementation Guide managed by AssetWorks.

FleetFocus Milestone Schedule

Professional services will be provided on a **Fixed Fee** basis with specific milestone amounts and adheres to the milestone description and schedule listed below as well as the scope contained within this overall Statement of Work (SOW). All amouunts are listed in USD and do not include applicable taxes. As noted above, AssetWorks is willing to have further discussions with WVDOT to clarify WVDOT requirements and scope to work towards an overall reduction in proposed services and cost where possible and necessary.

WV DOT RFP (09.20.21)		
AssetWorks EAM/FleetFocus Implementation Milestones		

#	WVDOT Pricing Sheet Deliverables	FleetFocus & CAM Milestone Names	Milestone Amount (USD)
EAM-1	Project Work Plan	Deliver initial project work plan	$13,166.95
EAM-2	Project Kick-off Meeting	Conduct onsite kick-off meeting - 1 travel trip with two resources	$30,333.91
EAM-3	Project Management Plan	Deliver project management plan	$16,458.69
EAM-4	Quality Management Plan	Deliver quality management plan	$10,972.46
EAM-5	Knowledge Transfer Plan	Deliver knowledge transfer plan	$10,972.46
EAM-6	Stakeholder Engagement Plan	Deliver stakeholder engagement plan	$10,972.46
EAM-7	Organizational Change Management Plan	Deliver organizational change management plan	$10,972.46
EAM-8	Master Test Plan	Deliver master test plan	$16,458.69
EAM-9	Data Conversion Plan	Deliver data conversion plan	$10,972.46
EAM-10	Interface Plan	Deliver interface plan	$13,166.95
EAM-11	Training Plan	Deliver training plan	$6,583.48
EAM-12	Go-Live Deployment Plan	Deliver go-live deployment plan	$10,972.46
EAM-13	Post Go-Live Plan	Deliver post go-live plan	$10,972.46
N/A	System Detailed Design Document (SDDD)		N/A
EAM-14	System Detailed Design Document (SDDD)	Complete Business Process Design Workshops - 1 travel trip with one resource	$33,182.98
EAM-14.1	System Detailed Design Document (SDDD)	Deliver Conference Room Pilot - 1 travel trip with two resources	$33,182.98
EAM-14.2	System Detailed Design Document (SDDD)	Deliver Business Process Review TO BE Report	$33,182.98
EAM-14.3	System Detailed Design Document (SDDD)	Deliver system setup sessions	$33,182.98
EAM-15	Security Plan	Deliver security plan	$10,972.46
N/A	Requirements Traceability Matrix		N/A
EAM-16	Requirements Traceability Matrix	Deliver fit/gap and requirements - 1 travel trip with one resource	$28,431.15
EAM-16.1	Requirements Traceability Matrix	Deliver requirements traceability matrix	$28,431.15
EAM-17	Configured Software	Configure SOW Listed FleetFocus Modules per WBS A.4.1	$59,251.29

EAM-18	Unit Tested Interface Programs	Deliver overview sessions on MAXQueue interface program and interface testing methodology	$4,388.98
EAM-19	Unit Tested Conversion Programs	Deliver overview and data conversion tools training and conversion methodology	$4,388.98
N/A	Mock Data Conversion 1		N/A
EAM-20	Mock Data Conversion 1	Mock Data Conversion 1 - Load Equipment, Parts & Summary Cost History in Test	$32,917.38
EAM-20.1	Mock Data Conversion 1	Mock Data Conversion 1 - Load 3 Years Historical Work Order Detail for Active Assets in Test	$35,111.87
N/A	Mock Data Conversion 2		N/A
EAM-21	Mock Data Conversion 2	Mock Data Conversion 2 - Load Equipment, Parts & Summary Cost History in Production	$32,917.38
EAM-21.1	Mock Data Conversion 2	Mock Data Conversion 2 - Load 3 Years Historical Work Order Detail for Active Assets in Production	$35,111.87
EAM 22	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 1 - Assets, Analytics and Planning Deployment (2 travel trips of one resource)	$56,480.00
EAM 23	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 2 - Procurement & Disposal Deployment (2 travel trips of one resource)	$33,520.00
EAM 24	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Specifications	$19,188.00
EAM 25	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Interface	$12,792.00
EAM 26	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Specifications	$17,958.00
EAM 27	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Interface	$11,972.00



EAM 28	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Specifications	$17,958.00
EAM 29	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Interface	$11,972.00
EAM 30	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Specifications	$9,102.00
EAM 31	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Interface	$6,068.00
EAM 32	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Specifications	$9,102.00
EAM 33	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Interface	$6,068.00
EAM 34	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Specifications	$11,316.00
EAM 35	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Interface	$7,544.00
EAM 36	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Specifications	$10,332.00
EAM 37	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Interface	$6,888.00
EAM 38	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Specifications	$9,594.00
EAM 39	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Interface	$6,396.00
EAM 40	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Specifications	$19,188.00

EAM 41	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Interface	$12,792.00
EAM 42	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Specifications	$9,102.00
EAM 43	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Interface	$6,068.00
EAM 44	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Specifications	$5,412.00
EAM 45	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Interface	$3,608.00
EAM 46	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Specifications	$15,744.00
EAM 47	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Interface	$10,496.00
EAM 48	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Specifications	$10,824.00
EAM 49	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Interface	$7,216.00
EAM 50	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$9,594.00
EAM 51	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$6,396.00
EAM 52	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$7,626.00
EAM 53	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$5,084.00
EAM 54	System Test Report	Deliver system test report	$6,583.48
EAM 55	Integration Test Report	Deliver integration test report	$6,583.48
EAM 56	Security Test Report	Deliver security test report	$10,972.46
EAM 57	Performance Test Report	Deliver performance test report	$10,972.46
EAM 58	User Acceptance Test Report	Deliver user acceptance test report	$28,528.40
EAM 59	Training Materials	Deliver training materials	$32,917.38

EAM 60	Training Course Pilot (pre User Acceptance Test)	Deliver pre-training and assist customer in user acceptance testing for ten days - 1 travel trip with two resources	$43,500.86
EAM 61	End-user Training	Deliver train-the-trainer training - 2 travel trips with one resource	$23,750.43
EAM 62	Enterprise Readiness Plan	Deliver enterprise readiness plan	$13,166.95
EAM 63	OCM Support/Materials per approved plan	Deliver OCM materials	$32,917.38
EAM 64	Cut-over to Production	Assist customer in deployment of go live checklist and assist onsite for 3 weeks - 3 travel trips with one resource	$43,306.37
EAM 65	Acceptance	26 weeks onsite at maximum of 3 days per week; includes 2 trips for PM; travel included at $56,000.	$209,750.00
		Total Professional Services Costs (Inclusive of 13 - FleetFocus, 4 - CAM & 28 - post implementation travel trips)	**$1,433,980**

FleetFocus Optional Services

Any items listed as optional in the AssetWorks Order Form and not noted in the above Statement of Work can be added upon request. A full scope, deliverables and pricing will be appended into this SOW and presented back to the customer for review and prior to any final contract signatures.

FleetFocus Standard Assumptions

The following general assumptions apply to this proposal:

General

- Professional services will be provided on a **Fixed Fee** basis with specific milestone amounts and adheres to the milestone schedule listed above and scope desciption of the milestone in context to this statement of work.
- Specifically, for all document deliverables for the various plans listed, the milestone is considered complete after delivery of the plan to the customer for review and incorporation of the customer's feedback into the plan for a second delivery.
- For any changes to this Scope of Work as noted above, a signed change order and/or other legally approved amendment must be provided from the customer in order to proceed with the billing of additional costs not contained in this scope of work. The only exception being travel costs as that is variable and travel is provided as an estimate.
- Any onsite services provided are done so as a minimum of three (3) days onsite and require a minimum of eight (8) hours a day to be billed by an AssetWorks' resource or four (4) hours if the resource is available for an additional half day.
- Only those modules identified in the accompanying license agreement are to be implemented and are included in this Statement of Work.
- Optional modules purchased after implementation has begun will require a change order or separate statement of work for services related to installation, configuration and training.
- Where applicable, standard training materials will be utilized; scope does not include customized training materials.
- Travel expenses have been included in the appropriate milestones and are estimated for a maximum trip of four days for cost purposes but adheres to scope on numbers of days expected to be onsite for each trip (i.e., post implementation 26-week period at three days max). Where an onsite trip is expected, it is listed in the body of the statement of work (SOW).
- This Statement of Work does not include any costs associated with third party vendors or software not already provided by AssetWorks that may be needed to complete the implementation.
- AssetWorks is the author, owner, distributor and sole source provider of fleet management software, professional services and maintenance services for the FleetFocus™ family of products which includes FleetFocus, FA, M5, MCMS, M4 and FleetFocus™. Use of the products is subject to the Software License Agreement.
- If this order is abandoned/paused by the WVDOT for any reason mid-effort, the WVDOT will be billed for all of AssetWorks time incurred at the current contracted labor rate.

Project Delays

- When Professional Service days are contracted, they are removed from AssetWorks' capaWVDOT and considered sold to the customer, and as a result AssetWorks makes financial plans based upon the revenues it expects to achieve from the full performance of the contract. It is impossible for AssetWorks to know in advance whether or under what circumstances it would be able to resell the service days if the customer does not use them, either as the result of delaying or canceling meetings, tasks or deliverables. In most instances, when customers do not use the contracted time, AssetWorks is unable to resell those days or services. Even when days or services may be resold, it is costly to re-market the services, and such efforts divert effort to do so. While customer days have been held out of AssetWorks' capaWVDOT planning, AssetWorks may have turned away or delayed the start of other customers in order to meet

AssetWorks' commitment to the customer. For these reasons, AssetWorks and the customer agree that in the event of delay or cancellation of scheduled project tasks and meetings at the customer's request within two weeks of execution, AssetWorks shall be due compensation equal to the contracted amount to deliver the services cancelled including any travel expenses incurred in preparation for the delayed or cancelled services.

Customer Resources

- All functional and operational groups who will be using and/or impacted by the new system should participate in all the sessions which will be conducted once. Repeating previously run sessions may require a change order for additional project budget.
- WVDOT will provide the resources described in this Statement of Work to insure a successful implementation of the products.
- WVDOT will appoint a single point of contact for the duration of the project. This person should have project management responsibilities and decision-making authority. This person will be the focal point of contact for AssetWorks' Customer Support department.
- All key WVDOT project team resources will be committed to the project as of the project start date.
- WVDOT commits to training appropriate functional and technical resources as required.
- WVDOT is responsible for all manual data entry.
- WVDOT will have all of the necessary and appropriate personnel at all of the meetings for the purpose of defining the requirements of the system. If additional meetings are required to repeat discussions due to the unavailability of WVDOT resources, additional cost will be invoiced.
- AssetWorks will provide onsite training to WVDOT (as outlined above) in a classroom environment suitable for training. AssetWorks recommends class size to not exceed 10 users to ensure proper attention can be given to individual users and maintain the needed pace to ensure training sessions are completed in a timely manner consistent with the training schedule. If training is proposed as all remote, then web conferencing tools will be used in place but the customer is still encouraged to not exceed 10 users to allow for effective training.
- WVDOT will be responsible for preparing the training facility. The training facility should include hardware comparable to that found in the actual work place. Some end-user training can take directly in the storerooms or on the shop
- All training sessions will be based on standard application training materials. WVDOT will be responsible for customizing training materials to meet its implementation requirements.
- WVDOT will make appropriate technical resources available to AssetWorks' consultants.
- In the event that WVDOT schedules on-site services and due to circumstances within WVDOT's control AssetWorks' scheduled personnel are unable to perform such services, AssetWorks will be entitled to payment for each such scheduled personnel on the basis of an 8-hour day.
- AssetWorks will need assistance from WVDOT to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Infrastructure

- WVDOT will provide a project work area and infrastructure at the centralized implementation location appropriate for the size of the combined WVDOT/AssetWorks project team. This infrastructure should include desks, chairs, telephones, and workstations with network access to printers and to the applications and implementation databases.
- AssetWorks' consulting estimates do not include installation and/or configuration of any computer hardware and peripheral equipment.
- WVDOT will be responsible for installing and configuring computer hardware and peripheral equipment such as printers and bar code equipment (if applicable).



- WVDOT is responsible for providing browser access to the FleetFocus™ application.
- WVDOT is responsible for providing and maintaining TCP/IP connectivity with sufficient bandwidth from all user workstations to the FleetFocus™ servers.
- WVDOT will receive all standard, out-of-the-box reports with the purchase of the reporting module; the reporting module leverages the Crystal Reports Server OEM Edition license. A non-production and production reporting environment will be implemented.
- WVDOT will utilize a single production FleetFocus™ database. A test database instance will also be implemented.
- The following information technology services are not included in this Statement of Work: network connections; telecommunications network(s); operating system, network and database administration; disaster recovery planning; the acquisition, installation, testing and tuning of any required hardware, operating software, peripherals and communications infrastructure.

Project Management and Risk Factors

- WVDOT and AssetWorks will agree on scope, services, and deliverables for optional modules and services prior to the Notice to Proceed.
- WVDOT project manager will be responsible for obtaining any required authorizations, approvals and/or signoffs by WVDOT related to project deliverables and project progression in a timeframe in alignment with the project work plan. Delays to this process as well as any WVDOT tasks not completed within the work plan timeframe will be subject to the Change Order Management process, delayed deadlines, and increased services fees.
- This Statement of Work does not include the expenses associated with WVDOT or WVDOT resources assigned to the project.
- WVDOT remains responsible for all integration effort not described in this Statement of Work
- The project schedule is contingent upon the timely attainment of several external milestones that are outside the control of AssetWorks. Examples include but are not limited to the acquisition of the requisite software licenses and hardware and the approval of requisite capital appropriation requests as required.
- Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and WVDOT will discuss these changes in good faith at their earliest opportunity.
- This proposed Statement of Work includes implementation support for only those optional modules, interfaces, and modifications listed in the task list. Any change to the proposed Statement of Work, particularly the implementation services, data conversion, interfaces, and application modifications, will be documented and follow the same procedures for new enhancements or change orders.
- Unless otherwise noted, all integration, enhancement and report development effort quoted in this proposed Statement of Work are an estimate based on AssetWorks' experience providing similar services for other clients based on our current understanding of the requirements. AssetWorks will develop a detailed Development Specification for all services before proceeding with any development.
- This Statement of Work includes services to determine WVDOT's requirements and preparing the development specifications and quotes for only those development items identified in this Statement of Work. Any requirement analysis and specification work for additional items not identified in this Statement of Work would be done on a time and materials basis.

Technical Services / Interfaces

Custom Reports Standard Terms

- All custom reports require a licensed and installed Reporting Module in a non-production and production environment for reports to be run from the FleetFocus web portal.

- If AssetWorks is contracted to make modifications to a customer created report and identifies areas with incorrect design and/or data, AssetWorks will notify the customer immediately. If the customer requires AssetWorks to resolve the issue, it will require a change order.
- Customer is responsible for working with AssetWorks' Professional Services to provide their business process and identify specific system data mapping/elements requirements for the purposes of developing an approved functional and technical specifications for AssetWorks' Development to proceed with building a custom report.

Product Enhancements Standard Terms

- For all product enhancements, full and final design details will be determined by AssetWorks Product Management during the internal scoping process and discussed with the customer. Exact naming conventions and fields are subject to change upon creation of the specification document and final design by AssetWorks.
- For all product enhancements, if the quoted design details are requested to change, all other noted scope and assumptions are negated and a re-quote or change order will be required.

Custom Interfaces Standard Terms

- The custom interface(s) assumes usage of all FleetFocus settings out of the box (i.e., user security rights by screen level, no PMs on repair orders, requirement of work accomplish codes on tasks, etc.), no additional rules outside of standard application logic are to be used such as advanced lookups or data transformations unless noted above in the scope and assumptions.
- The custom interface(s) assumes that only fields currently available within FleetFocus are available to be sent and all fields utilized adhere to the FleetFocus data type and field length of the specific field, unless noted above in the scope and assumptions.
- Interface is quoted for only supported versions and only for a specific version if noted above in the scope and assumptions.
- This interface will be delivered in a future release if specified above or a custom package for customer's current version, as determined by AssetWorks during development phase. Interfaces are quoted for only supported versions and assumed logic is quoted utilizing the latest major build release.
- Interface errors or rejects will be sent to the MAXQueue error handler to review/reprocess. Customer is responsible for the management of errors/rejects; standard error processing rules and logic of FleetFocus will apply.
- Unless noted above in the specified interface scope and assumptions, all custom interfaces quoted only allow for all errors to be directed to a single MAXQueue error portal for review and re-processing. If as an example, multiple groups within an organization need to see separate errors based on a variable criteria or by their group in different MAXQueue error portals, it would be considered a change request.
- Customer is responsible for any errors outside of FleetFocus from any external system, and these will not be processed through FleetFocus.
- Customer is responsible for working with AssetWorks' Professional Services to provide their business process and identify the external system data mapping/elements requirements (i.e., web services, XML, APIs, etc.) for the purposes of developing an approved functional and technical specifications for AssetWorks' Development to proceed with building a custom one-time integration.
- Customer is responsible for coordinating and sending requested sample data files, web services schemas, coordinating FTP file transfers and any other technical information such as the required external system mapping of data elements and/or files requested by AssetWorks for functional and technical specification(s) creation, development and/or quality assurance purposes.



- Customer is responsible for building their side of the interface(s) for the external system(s) to push and pull data based on the direction specified as part of the interface.
- If using web services or APIs, the customer must provide a fully maintained web service and API from the external system. The interface assumes the 3rd party technology is available within the FleetFocus standards to be able to access these methods and services. The customer's system must be capable of providing AssetWorks with the proper services and/or connections so that FleetFocus can distinguish data updates such as "INSERT" and "UPDATE" data and send items using triggers rather than timers. FleetFocus will process each change in this method specified, as it is received. FleetFocus assumes no call backs from 3rd party system web services or APIs that require additional data transformations.
- If the integration is scoped to accept attachment transfers, the customer must send one file per transaction and must send them in the FleetFocus supported format.
- All custom interface(s) require a licensed and installed MAXQueue Integration Module in a non-production and production environment and to be specified and built by AssetWorks.

Custom Deliverable(s) Standard Terms

- All technical services must be re-quoted if not signed with 60 days of delivery of the quote.
- AssetWorks reserves the right to adjust the above quoted delivery version and standard delivery timeline if this quote is not signed within 60 days of initial delivery or earlier if noted above.
- Signed functional and technical specification(s) take precedence on all design and development.
- Development delivery timelines will be set upon signature of the specification by the customer; average scheduling is within a 90-day delivery window post-signature, though can vary based on date of signature. These dates will be coordinated as part of the project plan once specifications are signed.
- For AssetWorks to begin development, a customer approved custom deliverable specification(s) with data mapping to the FleetFocus database must be reviewed, approved, and signed by the customer; this includes any iterations after the initial approval.
- Approval of all functional and technical specifications are required by the customer within 45 days of delivery by AssetWorks or AssetWorks reserves the right to adjust the delivery version and delivery timeline.
- Testing is the customer's responsibility and expected to be completed within 30 days of delivery of the custom deliverable(s) by AssetWorks, unless otherwise noted. If the custom deliverable(s) is a product enhancement, the Customer will be required to complete testing in the first available version containing the product enhancement, including an early delivery release if made available.
- All services will be performed remotely using web teleconferencing, unless otherwise noted.
- Non-production and production are required to be on a generally available (GA) release and the supported version(s) per assumptions noted above for custom deliverable(s).
- Customer may be required to upgrade, if FleetFocus business logic changes in future releases that impacts the dependencies for the custom deliverable(s). Upgrade services for FleetFocus are not included, unless otherwise noted.
- If customer changes their database type after signing design specifications a change order will be required.
- If a customer's internal systems (i.e., ERP) require any additional analysis, configuration and/or development to support the proposed custom deliverable(s), AssetWorks assumes the customer will provide internal resources to immediately resolve any work and/or process resolution needed to support the agreed upon project timeline. If AssetWorks is required to assist, a change order will be necessary.

- Customer will make appropriate technical resources available to AssetWorks' consultants and have all of the necessary and appropriate personnel at meetings for the purpose of defining the requirements of the system and project.
- Customer will appoint a single point of contact for the duration of the project. This person should have project management responsibilities and decision-making authority. This person will be the focal point of contact for the AssetWorks' Professional Services and Customer Care team.
- Customer is responsible for the setup of all FleetFocus data that is required to support the custom deliverable(s), unless otherwise noted.
- AssetWorks assumes customer utilizes an internal system administrator to maintain all aspects of FleetFocus configuration, user training and system administrator duties as required to support this custom deliverable(s).
- Customer will be responsible for working with the AssetWorks' Professional Services and Customer Care teams to move the custom deliverable(s) into a production environment.

Logistical and Scheduling Support

AssetWorks will need assistance from WVDOT to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Procedures for Handling Change Orders

If there is a change to the scope, or additional requirements to the project, these will be documented in the project change log, and the AssetWorks PM will review these potential changes with the WVDOT PM to determine the need and priority for the change. If the change is something that will be required, then the next determination would be who will be responsible for executing the change, if the change will result in a change of scope requiring additional support or effort from AssetWorks a formal change order request will be developed and provided to WVDOT for review and approval to be added to the scope of work. Any changes to the scope of work will be reflected in the project decision log and will result in updates to the project scope of work, schedule, and budget, including the addition of any additional milestones. Only after all parties agree on the need for the change, and the plan for integrating the change into the overall implementation project plan, would AssetWorks begin work on this change.

Confidentiality

This proposed Statement of Work (SOW) contains CONFIDENTIAL INFORMATION of AssetWorks LLC. In consideration of the receipt of this document, WVDOT agrees to not reproduce or disclose this information except to WVDOT employees directly involved on a "Need to Know" basis.

AssetWORKS

STATEMENT OF WORK SUMMARY

State of West Virginia

Q-08257

CAM

AssetWorks EAM/AssetWorks EAM/FleetFocus Capital Asset Management Module

CAM Implementation

09.20.21

CAM Table of Contents

Contents **2**

FleetFocus Introduction **5**

Implementation Approach 6

FleetFocus Project Task Descriptions **6**

WBS A.1.0 Initiation 6

WBS A.1.1 Project Management and Oversight Services 6

WBS A.1.2 Hardware Acquisition 17

WBS A.1.3 Software Installation Services 18

WBS A.2.0 Discovery 20

WBS A.2.1 Initial Requirements Assessment 20

WBS A.2.2 Business Process Review 21

WBS A.3.0 Design 23

WBS A.3.1 System Design Services 23

WBS A.4.0 Build 25

WBS A.4.1 System Configuration Services 25

WBS A.4.2 Data Conversion Services 28

WBS A.4.3 Technical Services 33

WBS A.5.0 Train & Test 50

WBS A.5.1 Pre-Training Testing Services 50

WBS A.5.2 Training Services 53

WBS A.6.0 Deployment 61

WBS A.6.1 Production Cut Over 61

WBS A.6.1 Post Implementation Period 62

FleetFocus Preliminary Schedule **63**

FleetFocus Milestone Schedule **63**

FleetFocus Optional Services **68**

FleetFocus Standard Assumptions **69**

Table of Contents **76**

Introduction **79**

CAM-1 Complete Project Start-up and Kick-Off Meeting **80**

CAM-1.A Project Startup Call 81

CAM-1.B Implementation Questionnaire 82

CAM-1.C CAM Sandbox Conversion Site Installation 82

CAM-1.D Data Export and Conversion Database Setup 83

CAM-1.E CAM Hosted Environment Installation 83

CAM-1.F Project Kick-Off 83

Milestone Responsibility Matrix 84

CAM-2 Deployment Phase 1 –Analytics and Planning Modules **85**

CAM-2.A CAM Setup and Configuration 85

CAM-2.B Data Loading 89

CAM-2.C CAM-AssetWorks EAM/FleetFocus Interface Configuration 93

CAM-2.D Readiness Testing 94

CAM-2.E Analytics and Planning User Training 96

CAM-2.F Analytics and CAM Go-Live Deployment 97

Milestone Responsibility Matrix 98

CAM-3 Deployment Phase 2 – Procurement Module **100**

CAM-3.A Procurement Setup and Training 100

CAM-3.B Customer Procurement Template Setup 101

CAM-3.C Load Test Environment 102

CAM-3.D CAM to AssetWorks EAM/FleetFocus Interface Configuration 102

CAM-3.E Test Procurement Workflows 103



CAM-3.F Load Production 104

CAM-3.G Procurement Production Deployment 104

CAM-3.H Procurement Production Go-Live 105

Milestone Responsibility Matrix 105

CAM-4 Deployment Phase 3 – Asset Disposal 108

CAM-4.A Review Disposal Work-Flow 108

CAM-4.B Setup Disposal Codes and Steps 108

CAM-4.C Load Disposal Steps to Test 108

CAM-4.D Test Disposal Processes and Interface 108

CAM-4.E Load Production 109

CAM-4.F Disposal User Training 109

CAM-4.G Disposal Go-Live 109

Milestone Responsibility Matrix 109

Project Organization 111

AssetWorks Project Team 111

Recommended WVDOT Project Team 113

Assumptions 115

Procedures for Handling Change Orders 117

Sole Source Provider 117

Confidentiality 118

CAM Introduction

AssetWorks is pleased to assist State of West Virginia Department of Highways / Department of Transportation (WVDOT) with the implementation of the Capital Asset Management (CAM) application. This Statement of Work (SOW) identifies the tasks required for the implementation of the Capital Asset Management (CAM) solution. This SOW is based on AssetWorks' current understanding of the requirements and AssetWorks' previous experience with similar engagements.

To best facilitate the implementation, AssetWorks urges WVDOT to formally identify a core team of members from each of the critical business groups who will participate in or be affected by the project implementation. This involvement must come from all parties. This core team should be both technically qualified and knowledgeable of their groups' business practices. These individuals will be responsible for spearheading the system configuration, data mapping, and workflow tasks to ensure a feasible and effective production rollout.

CAM Product Overview

CAM is a software tool that helps an organization better manage the overall lifecycle of its assets. The CAM module is integrated with the AssetWorks EAM/FleetFocus application and includes three core modules: Analytics/Planning/Budgeting, Procurement, and Asset Disposal.

This Statement of Work outlines the services to be delivered by AssetWorks to WVDOT for the implementation of the current production CAM release. The production version of CAM will include the following functionality but may or may not include the services; all services to be noted further down into the SOW:

- CAM User Interface
- Security: user roles, users, system flags
- References: codes, departments, vendors, locations, people
- Events: notifications and tasks
- Asset Register and Design: asset main, category, spec type, attributes, specifications, and options
- History Journals: usage journals (time, distance, count), maintenance journal, energy journal, capital journal
- Analytics: category reference life-cycle cost models, custom life-cycle cost analysis, maintenance forecasts, MRU calculation, and asset analysis
- Planning: replacement parameters, replacement scoring, plan generation, plan adjustment, plan export/import, plan forecast, budget manager, and budget lines
- Procurement: asset requests, requests approvals, order builder, orders, production, delivery allocation, delivery export/import, receipt, acceptance, assembly, and mobile receipt/inspection
- Disposal: disposal steps, remarketing profile, settlement and reconciliation, and internal auctions
- Reporting: Integrated on-line reporting module, including ad-hoc reporting, dashboards and visualizations.

AssetWorks proposes to implement this project in three phases. The goal is to bring CAM live as quickly as possible and setup the interfaces to have the CAM and AssetWorks EAM/FleetFocus databases in sync. Once assets and history are loaded, the Analytics and Planning modules are ready for use. The phases are:

1. Analytics and Planning Modules

2. Procurement Module
3. Disposal Module

The detailed implementation plan outlined in this Statement of Work document describes the services that the AssetWorks Professional Services team will deliver to ensure a successful implementation of the AssetWorks EAM/FleetFocus application. Functionality will be implemented based on what is available at the time of deployment.

Enhancements

If during the implementation, if it is determined that custom functionality, enhancements, or modifications are needed to support WVDOT process or workflows, AssetWorks will prepare detailed design specifications with a fixed cost estimate and timeline to complete the development. AssetWorks will be solely responsible for all enhancement development and will deliver the updated application code in a schedule release. This SOW assumes no enhancements.

Interfaces

All out of the box CAM integrations with AssetWorks EAM/FleetFocus are included in the base CAM application and will be configured during the setup phase. See A.4.3 for CAM custom interfaces. AssetWorks will have responsibility for the CAM portion of all interfaces, with WVDOT or vendor resources handling the external applications side of the interface. Interfaces will be delivered based in an AssetWorks CAM release.

Licensed Modules

- Analytics and Planning
- Procurement
    - Mobile Receipts and Inspection App
- Asset Disposal
- Ad Hoc Report Writer *(included with base license)*

CAM-1 Complete Project Start-up and Kick-Off Meeting

Project Management

AssetWorks will assign a Project Manager to lead the CAM implementation and coordinate all AssetWorks project activities. The AssetWorks Project Manager will ensure that enough resources are available to implement the system in accordance with the project requirements. The AssetWorks Project Manager will monitor the project resources to ensure quality delivery of services and that the deliverables are completed in accordance with the project requirements.

AssetWorks Project Manager will report directly to the PMO Manager (Project Director). While the Project Manager is the primary contact, the Project Director is WVDOT's first escalation point for any issues arising during the project, while the Program Manager will provide executive level communication and support.

AssetWorks expects WVDOT will appoint a Project Manager, who will lead the overall WVDOT project team and be responsible for the WVDOT personnel and resources on the project. AssetWorks recommends a System Administrator be designated who will be responsible for the configuration, implementation, and administration of the CAM module and server as the primary technical contact during the implementation.

In addition to the WVDOT Project Manager and System Administrator, AssetWorks recommends WVDOT appoint a core project team for the project implementation with Subject Matter Experts (SME) familiar with WVDOT's asset management business processes and procedures. The SMEs will serve as the functional lead and Key Users for their business area and will have responsibility for leading discussions and making decisions regarding the implementation and configuration of the functionality relevant to its operation. The core group representatives should have complete knowledge and familiarity with WVDOT's operations and objectives and will form most of the roll-out team later in the project.

Throughout the project, AssetWorks Project Manager will conduct bi-weekly or monthly (occurrence pattern based on project schedule) scheduled status meetings with WVDOT to review the project progress to-date, the status of all open issues, review new issues that have arisen since the last meeting and discuss any changes to project timelines and deliverables. AssetWorks will deliver these status meetings in a format and schedule as agreed upon during the Kick-off meeting. Changes to the format and schedule requiring additional effort beyond that agreed to may necessitate a change order.

AssetWorks maintains for each implementation an Issues Log. The Issue Log lists any issue that has been identified as impacting the delivery of the project. This may include issues related to application functionality, stability, and performance; known software errors and bugs; configuration questions; items related to loading and converting data; training; documentation; custom development and other project deliverables. The log is maintained by AssetWorks and will describe the overall issue, identify specific users responsible for the resolution, the expected delivery date, and the outcome/resolution of the issue.

The Project Manager is also responsible for generating all invoices for project services and deliverables in accordance with the agreed upon project payment schedule. The Project Manager is the first point of contact regarding any billing disputes and has responsibility for collecting all outstanding project invoices.

CAM-1.A Project Startup Call

This initial project management task is to initiate the start-up of the project by scheduling a Project Start-Up conference call with WVDOT. AssetWorks will commence the project upon receipt of the fully executed Professional Services Agreement or an official notice to proceed.

Upon receipt of notice to proceed, AssetWorks will initiate the Project Start-Up conference call with WVDOT's designated Project Manager to discuss how to kick-off the implementation. Key points for this initial call include:

- Introducing key members of the AssetWorks and WVDOT project teams.



- Scheduling of the Project Kickoff meeting.
- Reviewing key project deliverables, terms, and conditions.
- Distributing the CAM Implementation Questionnaire.
- Forming the core team.

CAM-1.B Implementation Questionnaire

Once the Notice to Proceed is received, AssetWorks will provide WVDOT with our standard CAM Implementation Questionnaires. The Questionnaires are separated by module/functionality and are intended to gather basic information regarding WVDOT asset management's current processes and procedures.

The questionnaire covers the following topics:

1. System Setup
2. Asset Design
3. Asset History
4. Lifecycle
5. Planning & Budgets
6. Procurement
7. Production/Assembly
8. Disposal
9. External Systems

WVDOT will have the responsibility of completing the questionnaires to the best of their ability by the schedule start of the Project Kickoff meeting. AssetWorks will review the questionnaire prior to the Kickoff Meeting and generate a list of questions and topics for review during that initial meeting. The answers to these items also help to inform the setup and configuration phases further discussed below.

CAM-1.C CAM Sandbox Conversion Site Installation

AssetWorks maintains a sandbox conversion environment during the implementation phase for all customers, including those that will maintain their own production environment. The purpose of the conversion site is to allow the customer and AssetWorks to jointly setup and configure the CAM application in a mutually accessible environment before applying the settings to the final production environment. This also allows hosted customers time to assemble their environments without delaying the start of the project while hardware is acquired, installed and configured.

As soon as receiving notice to proceed, AssetWorks will setup a conversion site in our Wayne, PA data center to begin the project. Each customer has their own conversion environment with a specific URL. AssetWorks will install our CAM Starter Database instance in our shared CAM database server to support the environment. An initial WVDOT Administrator User will be created to allow the customer access to the site. AssetWorks will also have a user that we will use to access the environment. This will allow logs to note which user updated the database.



Once the conversion environment installation is completed, AssetWorks will send to WVDOT the URL link and the username and password of the initial Administrator user. AssetWorks and WVDOT will test the link and once completed CAM will be ready for loading and training.

CAM-1.D Data Export and Conversion Database Setup

CAM has integrated data loader functionality that supports the mass insertion of data into CAM, as well as the ability to mass updated existing CAM records. This function uses Excel-based templates that are loaded with data extracted from the legacy fleet or asset management system. This initial task will be to get the data needed from AssetWorks EAM/FleetFocus, or other legacy system, and populate the templates. The templates will be reviewed by AssetWorks prior to the Kickoff meeting and any gaps or new data required will be reviewed during the Kick-off meeting.

The SaaS database will be installed in our secure conversion environment, where the AssetWorks CAM support team will have direct access to run the extraction scripts that are needed to populate the template, and in some cases load the CAM database directly using conversion scripts. In this scenario, AssetWorks takes responsibility for running the SQL extraction scripts and copying the extracted data into the CAM loader templates.

WVDOT will be responsible for exporting the database and uploading the export to our ShareFile site. AssetWorks will run all extraction scripts and load the CAM templates. AssetWorks will only convert data from a AssetWorks EAM/FleetFocus database and no other sources such as internal WVDOT documents or legacy systems.

CAM-1.E CAM Hosted Environment Installation

AssetWorks provides a hosted production environment for CAM customers. The hosted environment has shared application and database servers, with each customer having their own database instance and specific URL. All hosted customers are setup in an Oracle database environment.

AssetWorks will install two CAM environments in our Wayne, PA data center following the notice to proceed: Production and Sandbox. Additionally, an AssetWorks hosted conversion environment will be used to support the conversion and testing of the application prior to production delivery. The sandbox environment will serve as the test environment once CAM is live in production. AssetWorks will install the production site immediately after the project kickoff. A starter database will be installed as the production and conversion database.

Once the production environment installation is completed, AssetWorks will send to WVDOT the URL link and the username and password of the initial Administrator user. AssetWorks and WVDOT will test the link and once completed CAM will be ready for loading and training.

CAM-1.F Project Kick-Off

The Project Kick-Off Meeting is devoted to introducing the core project team to the AssetWorks team, the project implementation methodology, and the CAM application. After completing this session, the project team will understand the implementation process and will be prepared to start collecting the data required to setup and configure the system.

This meeting is typically about a half day and includes discussion and review of the following topics:



- Orientation on the CAM system,
- Project plan tasks and timeline,
- System Implementation Steps (*CAM Implementation Steps document*)
- Assignment of customer responsible tasks,
- Contract deliverables,
- Change management procedures,
- The data loading process, and
- Review the implementation questionnaire and data template gap analysis.

Based on discussions during the Kick-off Meeting, the AssetWorks Project Manager will revise the project plan and assign AssetWorks and WVDOT project resources to various tasks in the plan. Following the Kick-off Meeting, an updated project schedule will be delivered to WVDOT by AssetWorks.

WVDOT will assist in facilitating this session. WVDOT will provide a suitable meeting facility, with a projector and will be responsible for inviting attendees. AssetWorks will provide WVDOT with soft copies of the orientation materials, which will include presentation materials outlining the project objectives and product information. WVDOT will be responsible for producing and distributing any hard copies of orientation materials.

Milestone Responsibility Matrix

CAM-1: Complete Project Start-up and Kick-Off Meeting Milestone

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
CAM-1.A		Project Startup Call	• Introduce team • Schedule AssetWorks (AW)-WVDOT kick off meeting • Schedule AW resources	• Attend call • Form core team
CAM-1.B		Implementation Questionnaires	• Distribute questionnaires and provide deadline for return • Review questionnaires prior to project kick off	• Distribute questionnaires internally and submit by deadline
CAM-1.C		CAM Sandbox Conversion Site Installation	• Create sandbox conversion	• Test link to ensure correct connection and login to

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
			environment in Wayne PA • Distribute login credentials to WVDOT	confirm authentication
CAM-1.D		CAM Data Export and DB Conversion - Hosted	• AW will retrieve the FF database copy from hosted servers and install the FF Database in conversion environment	• WVDOT to ensure FF database is ready with correct assets for AW to pull if currently hosting with AW
CAM-1.E		CAM Hosted Installation	• AW to install Sandbox and Production CAM in AssetWorks CAM environment.	• WVDOT to allow access to the AssetWorks provided URL to the CAM Sandbox and Production environments
CAM-1.F		AssetWorks-WVDOT Project Kick-Off	• Conduct AW-WVDOT kick off meeting with contents of 1.F as described	• Attend meeting and collaborate with AW PM on schedule, tasks and present WVDOT objectives, etc.
	CAM-1	**Complete Project Start-Up and Kick Off Meeting Milestone**		

CAM-2 Deployment Phase 1 –Analytics and Planning Modules

CAM-2.A CAM Setup and Configuration

System Setup Workshops

Following the kickoff meeting, WVDOT and AssetWorks will begin to setup up the CAM module. A series of workshops will be held with AssetWorks and WVDOT subject matter experts and CAM administrators to review how the application is setup and maintained.

AssetWorks will walk through each of the setup and configuration screens to instruct WVDOT on the purpose of the reference, its role in the application and workflows, key decisions and assumptions that must be made in the definition of codes, and how to configure the data to support desired future-state outcomes.

During the setup phase, AssetWorks and WVDOT may setup and configure some settings and load sample codes with recommended configurations in the test environment. In some cases, some of the references that can be extracted from AssetWorks EAM/FleetFocus will be loaded during this session. It will be WVDOT's responsibility to make the corresponding setup and configuration in the production environment for data that is not loaded through the loader process

System Administration

During the system administration workshop, AssetWorks and WVDOT will review the Administration menu and focus on setting up:

- Enterprise
- System Flags
- Code Maintenance
- Key reference objects: Departments, Locations, Vendors
- System-Assembly Codes
- Job/Task Reason Transformation
- Application Security: Roles and Users

Asset Design

CAM can support both complex and simple assets. AssetWorks will conduct and an Asset Design workshop. During that workshop, AssetWorks and WVDOT will:

- Determine which assets will be maintained in CAM
- Categorize asset types into groups with a common component structure, lifecycles, and vocation.
- Determine the component structure of each asset type
- Create the Component Types to define the components and assign to categories
- Load and configure the Attributes that are common to the component and specific to the unit
- Create component Specifications (year, make, model, or generic description)
- Assign Options to Specifications
- Assign Specifications to Component Types
- Create valid Component/Specification combinations by Category

VIN Decode

CAM supports the use of VIN validation and decoding. The Assets template includes the asset number, serial number (VIN), year, make, and model. AssetWorks will submit this template through our VIN decode process and use that to validate that the VIN is entered correctly and generate a standard make,

model definition as well as populate several standard attributes that are generated through the decode process. Only a standard 17-character North American VIN can be decoded.

AssetWorks will provide the validated list to WVDOT to review, and in some cases select the appropriate body style and configuration where the VIN does not provide a specific match. This data will be used to standardize the make, model, and description of the asset before it is loaded into CAM.

Asset data extracted from AssetWorks EAM/FleetFocus and the VIN decode process will be reviewed to determine what changes and updates are needed to support the CAM future state. Additionally, WVDOT will have responsibility to identify specific truck body information and clarify configurations where multiple configurations are returned.

During this workshop, we will also discuss how complex assets are purchased and assemble and the types of components that make up the asset category.

Asset History

AssetWorks and WVDOT will review the available asset history needed to load the CAM Data Mart. The review will look at the completeness and accuracy of the data to make determination as to what history data will be loaded into CAM. Among the data that will be reviewed is:

Asset Maintenance History – At the Job/Task level, the use of reason, system, and assembly codes. The recording of labor hours, labor costs, part costs and commercial costs (labor, parts, miscellaneous and taxes). We will review the customers labor rate methodology and history, and the use of markup rates. We will also review how warranty costs are managed and how credits are applied. The result of this review will be the configuration of the Job Reasons on the Transformation screen, grouping repair reasons into the CAM cost buckets and determining which are target and non-target reasons.

Downtime History – Is downtime being tracked and are maintenance and operating shifts used. How is downtime valued in the organization? Are rental rates available for substitute equipment.

Energy (Fuel) History – How are fuel transactions captured, what are the sources for transactions, and how are the products defined. The Energy Types table will be setup

Utilization – Understanding how meter types are setup and defined, what are the sources for meter readings, how accurate is the data, and how frequently are meter readings captured. This will be used to setup Meters on Component Types and Specifications.

Capital Costs – How were original acquisition costs recorded. How is post-delivery upfitting and prep costs captured and treated. What depreciation terms are in use, including method, term, and salvage percentage. Which is the system of record for calculating monthly deprecation and how are those expenses applied. How are write-offs and write-ups recorded. This will be used to setup Category Life-Cycle parameters.

Attributes

CAM can capture user defined attributes (Items or user-defined fields) that can record data about the asset. AssetWorks and WVDOT will review the current asset and specification attributes, extracted from AssetWorks EAM/FleetFocus to determine which attributes will be maintained in CAM, which will be required to be entered in



CAM, and which attributes will be maintained in AssetWorks EAM/FleetFocus. Also, we will review the standard attributes that are generated by the VIN decode functionality and the attributes that are used to update code and other data fields needed to create units in AssetWorks EAM/FleetFocus. The Attribute Master list will be updated. We will also discuss setting up validations and default values.

Interface System of Record

CAM maintains an Interface System of Record that determines for specific data records if CAM or AssetWorks EAM/FleetFocus is the system of record, and if changes to a record in the other system will be inserted into CAM, update an existing CAM record or are ignored. AssetWorks will walk WVDOT through this matrix to make determinations if any of the default settings should be changed.

WVDOT will be responsible for configuring CAM Categories to determine how each Category and Asset will be sent from CAM to AssetWorks EAM/FleetFocus (whole asset or as components). Specific AssetWorks EAM/FleetFocus codes will be setup as Attributes in CAM and assigned to Components and Categories as needed. Default values can be setup on the Category and will be loaded as the assets value in AssetWorks EAM/FleetFocus.

Customer Configuration Tasks

CAM enforces referential integrity at the database level; any electronic data conversion cannot be executed until all referenced data elements are loaded. The method used for loading the data will often depend on the number and type of records to be loaded, the availability of electronic sources to convert from, and the complexity of the reference. For many references, it is far easier to simply key in the code and required description.

During the workshops, AssetWorks and WVDOT will setup many of the minor code sets and setup sample records that can be used as templates or models for the setup of other records. WVDOT will take action items from the configuration process to finalize the definition of all relevant data elements and references and to use these definitions to configure the application. This configuration will build on the setup defined with WVDOT core team during the workshops and will focus on setting up and configuring the following:

- Events: Notifications and Tasks
- Asset Model: Category, Component Types, Specification build-out
- Attributes: Asset and Specification updates
- Category Lifecycle and Planning Defaults
- Building the Approval Matrix
- Creating Request Profiles

Templates will be provided to facilitate some of the larger data setups, with smaller sets updated manually. WVDOT will have responsibility for loading all manually entered records that cannot be sourced from a legacy system in both test and production environments and loaded through a template.



CAM-2.B Data Loading

The set of tasks in this phase will focus on setting up the CAM production database in preparation for deployment. The CAM data loader and its templates will be used to load the production database.

Data Extraction and Data Loading Process

AssetWorks has developed a template-based data loader process to load CAM. Because CAM will be integrated with AssetWorks EAM/FleetFocus, many of the reference codes (i.e.: Departments, Vendors and Locations) and asset related records will be loaded through the data loading process; while other, smaller code sets will be setup manually during the System Setup Workshops.

Empty templates are exported directly from the CAM application. There is one template for each record set.

The source of data will depend on the completeness of data in the maintenance system(s) that CAM will integrate with to populate the Data Mart. For AssetWorks EAM/FleetFocus customers most data required in CAM can be sourced directly from AssetWorks EAM/FleetFocus, assuming the data is loaded in AssetWorks EAM/FleetFocus. If key data is missing in AssetWorks EAM/FleetFocus, other sources can be used to populate CAM conversion templates for loading into CAM. For example, if components and purchase costs are not in AssetWorks EAM/FleetFocus, but exist in a fixed asset system, data extracted from the fixed asset system could be used to populate CAM.

For the initial production database load, AssetWorks recommends that WVDOT export a copy of its AssetWorks EAM/FleetFocus production database to AssetWorks so that we can run the preproduction SQL extracts to populate the Templates. See Data Export and Conversion Site Setup under Project Start-Up.

If WVDOT cannot export the AssetWorks EAM/FleetFocus database to AssetWorks to run the CAM data loader, then WVDOT will have responsibility for running the SQL to extract data from AssetWorks EAM/FleetFocus and any other source application that will be used to populate the templates. AssetWorks will provide the SQL to extract from AssetWorks EAM/FleetFocus. WVDOT will have responsibility for developing the scripts to extract data from non-AssetWorks sources. WVDOT will also have the responsibility for executing the data loader import process to populate the preproduction database and make all corrections as needed.

Once the templates are populated, WVDOT will be responsible for reviewing each template and completing all missing required fields. AssetWorks will provide a description of the contents of each field, its format, and valid values (depends on field type and rules). Fields that are not required can be populated to provide additional detail to the record.

Where references are modified or new references are introduced, it will be WVDOT's responsibility to update the other templates where the references are found, or for providing AssetWorks with a crosswalk table showing the old value and the new value for the field. For example, if a new Category code is being used, the Category on the Asset Template record must be updated to the new code, or an 'IS-WAS' mapping on separate table must be provided. It is highly recommended that once CAM is



deployed, the Category codes in CAM be synchronized with the source codes in the legacy system, and that the CAM Category code be assigned to the units in the legacy system.

Data is loaded into CAM using the template Import process within the CAM application. The populated templates are selected from a file directory and the data is imported into CAM following the same process as data manually entered on a screen inside CAM. The import process generates a result file that identifies each record successfully loaded (passed all validations), and all records that failed the validation and the reason for the failure. Those records that failed in the result file will be edited and resubmitted until all records are successfully loaded. AssetWorks will run the initial data loader process in the preproduction environment and work directly with WVDOT to correct data as needed.

System Reference Codes

AssetWorks will review with WVDOT the source of all references and data objects to determine which can be loaded electronically using templates and which must enter manually. During the setup workshops, AssetWorks will review the templates and discuss the data that needs to be loaded into the templates, and what WVDOT must do to populate and prepare the templates for loading. Data that cannot be loaded with a template will be entered manually by WVDOT.

The first set of templates that will be ran will be those that setup the key references needed to build assets:

System Admin Templates

1. Departments
2. Location
3. Vendors
4. System Codes
5. System Assembly Codes

Asset Structures

In order to load assets, several underlying codes and data structures must be put into place:

Asset Structure Templates

6. Category Group
7. Category Type
8. Category Subtype
9. Category
10. Component Groups
11. Component Types
12. Category Components

The setup and configuration of these templates will be reviewed during the Asset Design step.

Assets

The CAM module has an Asset Register that contains records for each asset managed in CAM. The initial data load will focus on loading all active, inactive, ordered, and assets in the disposal process into CAM. Assets that have been sold in the last 3-7 years will also be loaded to provide additional data for the Life-Cycle Cost Models. AssetWorks will review with WVDOT the quality of the sold asset data and make a recommendation on how far back to load sold units into CAM.

The following templates will be loaded, in order, through the data loading process:

Asset Templates

13. Energy Types
14. Commodities
15. Manufacturers
16. Make
17. Model
18. Trim
19. Specifications
20. Planning Specifications
21. Assets (Active)
22. Assets (Sold in last x years)
23. Components
24. Asset Component Cost

Attributes

Attributes are a mix of standard AssetWorks EAM/FleetFocus fields that are needed to setup a unit in AssetWorks EAM/FleetFocus, but are not standard fields in CAM, and user-defined asset and specification fields to capture additional information about the asset and specification. These can be used to populate items and attributes in AssetWorks EAM/FleetFocus.

Initially, CAM will be populated with the existing Unit and Attributes from FA. The validations and values setup in AssetWorks EAM/FleetFocus will be loaded to the assets and specs in CAM. The following templates will be used.

Note, that not all AssetWorks EAM/FleetFocus Items and Attributes need to be loaded in CAM. Attributes that should be setup in CAM are those that can be captured before the asset is accepted in CAM, and those that are needed in CAM to support analytics and reporting in CAM.

For customers that are licensing only the Analytics and Planning modules, the setup of attributes is optional as CAM will not be updating attributes in AssetWorks EAM/FleetFocus, and only AssetWorks EAM/FleetFocus standard fields setup as AssetWorks EAM/FleetFocus attributes will be updated by the Unit Export interface. Attributes can be used in customer developed reports and loaded if needed for reporting.

Attribute Templates

25. Attribute Master List: Asset, Spec, AssetWorks EAM/FleetFocus, VIN



26. Category Attributes
27. Asset Attribute Validations
28. Asset Attribute Values
29. Component Attributes
30. Spec Attribute Validations
31. Spec Attribute Values

Run Data Load Cleanup Script

AssetWorks has a series of scripts that are used to complete the data load. These scripts set standard flags, link data objects together, and other clean-up actions that are not captured on the templates.

Asset History Batch Load

The CAM module has an Asset Register that contains records for each asset managed in CAM and a Data Mart that has several journals containing historical transactions: maintenance, usage, energy and capital. The Data Mart is linked to AssetWorks EAM/FleetFocus, or the legacy maintenance system, and is updated on regular basis via interfaces.

The CAM History Journal contains a series of journal tables containing historic transaction data from the legacy system. The History Journal is used to support Life-Cycle calculations and other analytic functions in CAM. Once CAM is in production, an interface with the legacy system will be used to update the CAM History Journal. While the interface can also be used to initially load the History Journal, it is may be more efficient to initially populate the application through a conversion process. AssetWorks will review WVDOT' historical records and make recommendations on what the best approach to populate the initial data may be.

The following considerations and assumptions will apply to each of the journals in the CAM History Journal:

Maintenance Journal – The Maintenance Journal includes individual job-level transactions loaded from the legacy system. Each journal transaction will include at a minimum the asset, system-assembly, location, date, reason, labor hours, labor cost, part cost and commercial cost. These transactions are typically loaded from the legacy maintenance system and generally do not require manipulation before processing. A review of reason codes will be made to determine which costs are maintenance and repair, non-maintenance, accident/damage, or capital improvements. This will be used to classify the costs in CAM. If detailed transactions are not available from the legacy system, periodic or life-to-date costs can be used to load historical values.

Usage Journal – The Usage Journal capture historic meter readings by type of meter and reading date. In AssetWorks EAM/FleetFocus this comes directly from the Meter Journal and is converted based on the meter type to one of the Usage Journals in CAM: Distance, Time, or Count. If detailed transactions are not available from the legacy system, or if the meter journal only contains recent history, periodic or life-to-date meter or usage amounts can be used to construct a Usage Journal in CAM.

Energy Journal – The Energy Journal in CAM is made up of fuel transactions, containing the asset, date, meter if available, type (diesel, CNG, electricity, etc.), quantity and cost. The transactions would come from either the legacy maintenance system or a fuel management system. If detailed transactions are not available from the



legacy system, or if the fuel system only contains recent history, periodic or life-to-date fuel quantity and cost amounts can be used to construct an Energy Journal in CAM.

Capital Journal – The Capital Journal contains historical purchase and capital improvement costs. This includes asset or component number, purchase cost, date, vendor plus some additional attributes about the transaction. The Capital Journal may also contain depreciation, adjustments, and disposal data as well. The journal should have at a minimum the original purchase cost of the asset, but if available any capitalized improvements and a breakdown of costs by asset or component. This data may come from the legacy system if captured but may also come from a fixed asset or procurement system. A template may be used to capture data not contained in AssetWorks EAM/FleetFocus and used to establish the historic purchase cost of assets not created in CAM. Once CAM is implemented, the Capital Journal will be populated as units are acquired and disposed in CAM.

Data Loading Review

AssetWorks and WVDOT will participate in a WebEx review of the loaded data. Using the preproduction site, AssetWorks will walk through the CAM application with WVDOT and review the loaded data. The objective will be to ensure that the data was loaded accurately and as completely as possible. Any issues and significant gaps will be identified in an issue log and a plan will be developed on how these will be addressed. Some items may not be critical for CAM functionality, which can be deferred to after deployment. Where data is critical to success use of CAM functionality, those will need addressed before deployment.

Update Data as Necessary

AssetWorks and WVDOT will make any updates needed to the data issues identified during the review. This may require editing data using a full template, scripting changes, or in worse cases, dropping records and reloading using the template. AssetWorks will recommend the best solution and work with WVDOT to make the updates. If templates must be reloaded or edited, it will be up to WVDOT to make those edits.

CAM Production Database Delivery

All preproduction work will be done in the AssetWorks conversion environment. Once the database is fully load and all required configurations and setup completed, the loaded CAM database will be exported for installation in the current AssetWorks EAM/FleetFocus instance. AssetWorks will assist with the import and test that the data was imported correctly.

CAM-2.C CAM-AssetWorks EAM/FleetFocus Interface Configuration

Once CAM has been loaded and installed in a production environment, AssetWorks will assist WVDOT with the configuration of the CAM to AssetWorks EAM/FleetFocus integrations. AssetWorks will provide instruction to WVDOT on how to setup and configure the interfaces.

Apply AssetWorks EAM/FleetFocus Patch

There are several interfaces that will be setup and installed in AssetWorks EAM/FleetFocus. The CAM-AssetWorks EAM/FleetFocus integrations are initiated from AssetWorks EAM/FleetFocus. Depending on the version of AssetWorks EAM/FleetFocus in production, a patch may need to be installed that inserts the CAM Interfaces into

AssetWorks EAM/FleetFocus. Within AssetWorks EAM/FleetFocus, the CAM integrations will be setup in the Interface Manager and/or MAXQueue.

The following interfaces will be setup:

AssetWorks EAM/FleetFocus to CAM

- CAM Maintenance Export – Exports maintenance history from AssetWorks EAM/FleetFocus to CAM. History is summarized by work order and job/task. The repair reason is included for each record, along with labor hours, labor cost, part cost and commercial repair costs.
- CAM Energy Export – Exports energy transactions, including date, energy type, quantity and cost
- CAM Downtime Export – Exports downtime hours if captured in AssetWorks EAM/FleetFocus
- CAM Meter Export – Exports the meter journal, including meter type, date and reading
- CAM Capital History Export – Exports capital journal transactions updated in AssetWorks EAM/FleetFocus (Depreciation, capital adjustments, salvage, etc.)
- CAM Unit Export – Exports new unit records entered directly from AssetWorks EAM/FleetFocus and updates unit records for changes in assignment, location, status and some codes.

Remotely Configure CAM and AssetWorks EAM/FleetFocus Services

AssetWorks will remotely connect to the customer's AssetWorks EAM/FleetFocus and CAM environments, and with the assistance of WVDOT will configure the interface services to connect CAM with AssetWorks EAM/FleetFocus. This will include setting on system users and parameters required to execute the interfaces.

Setup MAXQueue

AssetWorks will provide instruction and support assistance with the setup and configuration of MAXQueue in FA.

Activate AssetWorks EAM/FleetFocus to CAM Interfaces

For Phase 1 only the AssetWorks EAM/FleetFocus to CAM interfaces are needed. These will be used to sync CAM to AssetWorks EAM/FleetFocus by updating asset assignment and status. The history interfaces will also be run periodically to load asset history into the CAM data mart.

A test of the interfaces will be made and review of the loaded data in each application to determine if the configuration loaded all data as expected. After the test, the CAM Production environment will be fully configured. AssetWorks and WVDOT will conduct a final review of the interface configuration before declaring the application ready to deploy.

CAM-2.D Readiness Testing

A Readiness Review is used to verify CAM is ready for deployment. The purposes of this review is to walk through the work-flow process using a test environment to verify that the processes and system are functioning in accordance to the specifications for the tested function.

During this review, the focus will be on:

- **Data Loading/Conversions** – Was the legacy data correctly mapped and transformed into CAM? Are



there missing data elements that have not been converted that are available from an electronic source, or that need to be manually loaded?

- **Application Configuration** – Has the application been configured correctly to support planned workflows and is the data processed according to the expected configuration? Are the user roles correctly defined and authorizations assigned to meet expected workflows?

CAM Sandbox environment will be used to test application settings and functionality in a controlled environment using WVDOT data and configuration settings. The source of the test data will be the completed pre-production database the schema installed in CAM Sandbox.

AssetWorks will provide a standard basic test plan that consists of executing the primary functional and data validation tests that are part of the standard CAM test plan. WVDOT will modify the standard test plan to include any specific processes not addressed in the standard scripts. AssetWorks will review and recommend methods to test the additional requirements.

The actual testing will be the responsibility of WVDOT with AssetWorks participating in a review of the results at the end of the task. WVDOT will be responsible for executing the test plan using sample WVDOT data. WVDOT will document for each item the data used during the test and the outcome of the test.

For Phase I the following functionality will be tested.

Analytics

For the Analytics Module, testing will focus on the following functionality:

- Category Lifecycle and Replacement Parameter setup
- Life-Cycle Cost Models – Reference and Custom
- Scoring
- Asset Replacement Forecast
- Maintenance Forecasts
- Maintenance Repair Unit Calculations
- Repair vs Replacement Model

Planning and Budgets

The Planning and Budget Module will be tested to ensure that CAM can properly create, maintain, and assign a plan to a budget, and that the Budget displays the planned assets correctly. The functionality to be reviewed includes:

- Plan Manager – generate baseline strategic plans, standalone and parent-child tactical replacement plans, a growth plan, and a contingency plan
- Plan Forecasts – view the results of plans
- Plan Adjustment – make edits to a plan
- Plan Adjustment Export – export an excel version of a plan, make edits and import
- Budget – create a budget, setup default funding sources and authorization, and assign plan(s)



- Budget Lines – view assets from plan assigned to the budget.

AssetWorks EAM/FleetFocus to CAM Interfaces

The interfaces between AssetWorks EAM/FleetFocus and CAM will be tested as part of the previous tests as the analytics is dependent on the data mart to build models and analyze data. The interfaces will be reviewed to ensure all assets updates are being made in CAM from AssetWorks EAM/FleetFocus, and that asset data is being sent to CAM.

Review Test

AssetWorks and WVDOT will meet to review the test and its results. Where the results of the test did not meet expectations, these items will be reviewed with AssetWorks to determine if the data entered was invalid; if the application requires additional configuration; if the application must be reconfigured and if the failure was caused by a failure in the application code. Any items requiring modification to the application code will be scheduled into a planned patch or release depending on the severity of the issue and its impact to WVDOT's ability to go-live.

CAM-2.E Analytics and Planning User Training

This phase includes the final set of tasks needed to bring the CAM production environment live with the Analytics and Planning modules. The phase begins after the testing of the application's readiness for deployment. When the application is ready to deploy the production database will have the asset register and history updated through the CAM interfaces. AssetWorks will provide training support to end users/trainers using the test or sandbox environment with WVDOT's data.

The purpose of these workshop is two-fold: one is to provide general training on the application workflows so that users can understand how the application is configured to support their planned processes; and second to familiarize the principal users and system managers on how to use the application support their job functions.

AssetWorks recommends that WVDOT designate internal CAM module Trainers that will participate in this training and will provide training and support to new users and to casual CAM user.

The training will be organized into workshops focused on a CAM module and function. This will allow WVDOT to schedule attendees to attend sessions that are relevant to their job functions. The following outlines each workshop and the topics that will be covered

Analytics

- Setting up life-cycle parameters
- Life-Cycle Reference Models
- Custom Life-Cycle Modeling
- Asset Scoring
- Maintenance Forecasts
- MRU Analysis
- Asset Profile



Planning & Budgets

- Setting up planning parameters
- Building Plans: Baseline, Strategic, Tactical, Growth and Contingency plans
- Plan Manager Setup
- Plan Adjustment and Forecast
- Parent/Child Plans
- Plan Export/Import
- Budget Manager Setup and Authorization
- Budget Validation and Approval

Reporting

- Running Standard Reports
- Building Reports
- Dashboards

System Admin

- System Jobs
- Interfaces
- Interface Reject Manager
- Event Manager

CAM-2.F Analytics and CAM Go-Live Deployment

The final task of this phase is the actual production roll-out of CAM. This task requires the completion of Application Training, the completion of any acceptance testing, and the CAM system to be "live" on its production environment.

The process of bring CAM live will be the publishing of the Production URL to the CAM user community. Users will at that point can begin using the CAM to build life cycles, analyze assets, forecast maintenance costs, calculate MRU, build, and maintain plans, setup budgets and attach plans.

Depending on the amount of time between when the original converted data was extracted from AssetWorks EAM/FleetFocus, it may be possible to simply run the CAM Unit Export interface to load units that have been added and updated in AssetWorks EAM/FleetFocus. If there is any long lag between data extraction and go-live, it may require use of the CAM data loaders to load new assets or assets changes. In that case, WVDOT will update the asset and specification templates, as necessary, to update the production database with new assets, specifications and attributes added from the legacy source database since the last execution of the data loader templates. A second run of the templates will update the disposal status on units since the last date of the Asset Register data upload.

The initial CAM deployment will focus on the rollout of the CAM Analytics and Planning functionality:

1. Analytics – Once CAM is fully loaded, all the analytic functionality is available for use. One of the initial tasks will be to setup the System Jobs to generate Category Reference Life-Cycle Models, Maintenance Forecast and MRU Calculators. AssetWorks and WVDOT will setup the jobs and following execution, view the results in the analytics module screens.
2. Planning – One of the first tasks following go-live is to run a baseline master plan. This plan includes all CAM assets and uses the current settings on the Category Planning Parameters to forecast every assets next and subsequent replacement over a 30-year horizon. This will serve as baseline reference of the asset replacement needs from the time that CAM was first put into production. Tactical plans for upcoming budget years can be generated. Additionally, a plan can be developed manually to match the current purchasing plan before running plans.
3. Budget – Assets from previous budgets may be on order, or out-to-bid. WVDOT has the option of using their legacy process to complete these assets and transition all new budgets/plans to CAM for the next fiscal year or use a Budget Request process to build the open budgets and manually create requests for the outstanding items, associating them to a budget and begin tracking those assets through the procurement process.

Milestone Responsibility Matrix

CAM-3: Deploy Analytics and Planning in Production Milestone

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
CAM-2.A		CAM System Setup Workshops	• Conduct various system setup workshop meetings including key sessions on system administration, asset design, VIN decode, Asset History, Attributes, Interface system of record and	• Core team to attend all workshops • WVDOT to perform configuration tasks as noted in SOW (4.A)
CAM-2.B		Data Loading - Hosted	• Run pre-production scripts to populate CAM templates • Send CAM templates to WVDOT for review • AW to advise on templates and required data needed	• Verify AssetWorks EAM/FleetFocus PROD database is ready for AW to pull • Review populated templates and complete missing required fields

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
			• AW to run in WVDOT reviewed and approved final data templates to Pre-Prod and any necessary scripts • AW to send fully loaded and configured CAM pre-prod database to WVDOT •	
CAM-2.C		CAM-AssetWorks EAM/FleetFocus Interface Configuration	CAM-AssetWorks EAM/FleetFocus Interfaces to Install and Configure • CAM Maintenance Export • CAM Energy Export • CAM Downtime Export • CAM Meter Export • CAM Capital History Export • CAM Unit Export	• Setup and Configure MAXQueue (FA) interfaces in Test and Production with AssetWorks assistance
CAM-2.D		Readiness Testing	• AW to provide standard test plan of primary functional and data validation tests. • AW to participate in review of WVDOT's testing results	• WVDOT to modify standard plan to expand on specific processes not in standard set. • WVDOT to test and document results of workflows to confirm data setup is complete and expected results occur.
CAM-2.E		Analytics and Planning User Training	• AW to conduct the Analytics, Planning & Budgeting, Reporting and System Admin	• WVDOT to attend the Analytics, Planning & Budgeting, Reporting and System Admin

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
			workshop training classes	workshop training classes
CAM-2.F		Analytics and CAM Go-Live Deployment	• AW to support go live cutover	• WVDOT to participate in go live cutover
	CAM-2	**Deploy Analytics and Planning in Production Milestone**		

CAM-3 Deployment Phase 2 – Procurement Module

CAM-3.A Procurement Setup and Training

The setup of the Procurement module and training will occur simultaneously. AssetWorks will walk thru the procurement functionality with WVDOT and discuss the supporting data that must be setup to request, order, track, receive and accept an asset. Users will be taught how each function works and the steps required to complete the process.

Review Procurement Functionality and Current Processes

During the initial review of the Implementation Questionnaire and Business Process Review, AssetWorks and WVDOT will have discussed the current workflow for procuring assets. In this workshop, the current process workflow will be reviewed, with focus on how the process must adapt to the CAM functionality, and how CAM workflow will be adapted to the WVDOT workflows. AssetWorks and WVDOT will map out the general process, with WVDOT responsible for fully documenting the process and developing operating procedures in support of the process.

Request Setup

The first part of this workshop will focus on setting up the Request Denial Reasons, Cost Types, and Commodities needed on Code Maintenance.

AssetWorks will review WVDOT the request Approval Responsibility process to define what approvals, if any, will be setup in CAM and how users and departments are setup to support the intended process. AssetWorks and WVDOT will define the approval workflows, setup the Approval Responsibilities, assign those to users and departments and build Approval Rule Sets.

Additionally, Request Profiles can be used to restrict a user's ability to request certain categories, specifications, and options. AssetWorks will review how profiles are maintained and assigned.

Option Setup

Assets requests can include one or more options that users can select during the request and order process. During this workshop, we will review how options are setup on the Option Master Catalog, options groups can be used to organize options, how options are assigned to components, and setup on specifications. We will review the source of options and how the templates are used to upload options to the Catalog and configure options on the specification. Option Groups will be defined and setup. Some sample specifications supplied by WVDOT will be reviewed and their options setup in CAM.

Acceptance Checklist Setup

The CAM Receipt and Acceptance mobile application allows the user to while at the asset, complete a user-defined checklist. AssetWorks will walk thru the setup of the checklists, and how checklists can be assigned to specific categories of assets by Component Type. A couple of sample checklists based on examples provided by WVDOT will be used to construct inspection checklists in CAM.

Production Date and Step Setup

Complex assets that are assembled by multiple vendors that are paid separately through separate PO's, have multiple components that require serial numbers, or have production schedules and steps that must be monitored are tracked through the CAM Production functionality. During this workshop, AssetWorks and WVDOT will review the setup of production steps and dates, identify which categories will be tracked by this functionality and setup one or two model workflows. As part of this setup, the Date List and Production Reasons will be setup on Code maintenance. Production Steps and Dates will be setup on select Categories and will be used as a template to setup other categories with similar build processes.

CAM-3.B Customer Procurement Template Setup

This step is a follow-up to the previous step for WVDOT to complete loading the data templates needed to setup the underlying data needed to complete the procurement process. The customer will have responsibility for completing the following templates:

Options – setup the following templates, or build through the application:

1. Option Master Catalog
2. Option Component Types
3. Spec Options

Attributes –

1. Setup AssetWorks EAM/FleetFocus required fields as CAM Attributes and make required in CAM. Populate with current AssetWorks EAM/FleetFocus values.
2. M5 Items or FA Attributes that will be populated during the procurement process shall be loaded in CAM. Items or Attributes updated after assets are loaded in AssetWorks EAM/FleetFocus can be loaded and maintained manually in CAM using a data loader template, as these attributes but will not be updated in CAM after loaded.

Request Attributes – Using the Asset Attribute by Category template to select which attributes will appear on the Request to be completed before the Request is approved.

Production – setup in the application or using the following templates, production steps and dates

1. Date List (Production/Disposal)
2. Category Production Steps
3. Category Production Steps Components
4. Category Production Dates

Checklists – setup in the application new asset receipt and inspection mobile application checklists and assign to the Component Types

CAM-3.C Load Test Environment

The data templates populated in the prior task will be used to setup the procurement data in the test environment. The templates will be loaded in the following sequence:

1. Vendors
2. Option Master Catalog
3. Option Component Types
4. Spec Options
5. Required AssetWorks EAM/FleetFocus fields as AssetWorks EAM/FleetFocus Attributes
6. Asset Attributes by Category
7. Date List (Production/Disposal)
8. Category Production Steps
9. Category Production Steps Components
10. Category Production Dates

CAM-3.D CAM to AssetWorks EAM/FleetFocus Interface Configuration

Implementing production means assets will originate in CAM and then push to AssetWorks EAM/FleetFocus. This task will focus on installing, configuring and test those interfaces

Apply AssetWorks EAM/FleetFocus Patch

If necessary, a patch will be applied to AssetWorks EAM/FleetFocus to update the CAM to AssetWorks EAM/FleetFocus interfaces, otherwise the interfaces that were installed with the AssetWorks EAM/FleetFocus to CAM interfaces will be activated. The following list represents the current CAM to AssetWorks EAM/FleetFocus interfaces:

- CAM Unit Import – Imports new assets into AssetWorks EAM/FleetFocus once the asset has all AssetWorks EAM/FleetFocus required fields entered. Depending on system of record, select changes to CAM records may also be imported.
- CAM Item Import – Imports CAM Attribute updates to AssetWorks EAM/FleetFocus as either items or user-defined fields
- CAM Warranty Import – Warranty Profiles can be assigned to options. If selected, the warranty profile in CAM will be exported to AssetWorks EAM/FleetFocus to setup the unit warranty terms.



Remotely Configure CAM and AssetWorks EAM/FleetFocus Services

AssetWorks will remotely connect to the customer's AssetWorks EAM/FleetFocus and CAM environments, and with the assistance of WVDOT will configure the interface services to connect the additional CAM interfaces with AssetWorks EAM/FleetFocus. This will include setting up system users and parameters required to execute the interfaces.

Setup MAXQueue

AssetWorks will provide instruction and support assistance with the setup and configuration of MAXQueue in FA.

Activate CAM to AssetWorks EAM/FleetFocus Interfaces

For Phase 2 only the CAM to AssetWorks EAM/FleetFocus interfaces will be tested. These will be used to load assets, specifications, and warranty profiles into AssetWorks EAM/FleetFocus. A test of the interfaces will be made and review of the loaded data in each application to determine if the configuration loaded all data as expected. After the test, the CAM Production environment will be fully configured. AssetWorks and WVDOT will conduct a final review of the interface configuration before declaring the application ready to deploy.

CAM-3.E Test Procurement Workflows

Before moving into production, using the test environment and the data loaded from the test templates, WVDOT will have responsibility for testing the CAM work-flow screens. AssetWorks will provide a test script to guide the testers, who will use their own data to complete the test. The screens that will be tested include

Procurement

For the Procurement Module, testing will focus on the following functionality:

- Approve Asset Requests from a Budget
- Generate a manual Asset Request
- Requests – Update request assets and options, change spec, split request, deny request, approve request Build Intangible request and approve
- Build Orders – Add components/intangibles to new or existing orders
- Orders – Add vendor, rename order, adjust order schedule and prices, approve order adjustments, open order, close order
- Delivery Export/import – Export vendor and schedule worksheets, edit worksheets and import
- Production – track asset through production steps and dates, update serial number on components, test access by different users
- Allocation Agreement – Setup large multiweek delivery schedule
- Allocation Adjustments – Assign deliveries against locations and assets
- Receive Components – Receive asset components at a location
- Receive Intangibles – Receive intangible order
- Receive and Accept App – Receive assets, verify options, complete checklist, update attributes, reject asset, accept asset

- Acceptance – Review inspection results, update required attributes, reject component/asset, and accept component/asset
- Assembly – Assemble asset by assigning receive components to the primary component.

CAM-3.F Load Production

Update Templates as Necessary

The data loader templates used to load the test environment will be updated by WVDOT as necessary to address any issues discovered during Testing

Load Options, Checklists, Attributes, Production Steps

The templates for options, attributes and production steps will be used to load the CAM production database. AssetWorks will assist WVDOT with providing scripts to copy the inspection checklists from test to production, or WVDOT can manually recreate them or develop new ones in production

Load Component Types and Specifications

Use the data loader templates to load options, cost types and attribute updates to Component Types, and then load the options on the Specifications.

Load Component Types and Specifications

Use the data loader templates to load attributes and production steps to Categories.

CAM-3.G Procurement Production Deployment

This phase includes the final set of tasks needed to bring the CAM production environment live with the Procurement module. The phase begins after the testing of the application's readiness for deployment.

Production User Training

AssetWorks will provide training support to end users/trainers using the test or sandbox environment with WVDOT data. AssetWorks recommends that WVDOT designate internal CAM module Trainers that will participate in this training and will provide training and support to new users and to casual CAM user that may need to submit and approve requests. The training will be organized into workshops focused on a CAM module and function. This allows WVDOT to schedule attendees to attend sessions that are relevant to their job functions. The following outlines each workshop and the topics that will be covered

- Specification Setup
    - Specification Maintenance
    - Option Maintenance
    - Warranty Profiles
- Requests
    - Automatic and Manual Request Creation
    - Request Management and Approval



  - Build Orders
- Orders
  - Orders
  - Delivery Allocation
  - External Production
  - Delivery Export/Import
- Receipt/Acceptance
  - Receive Components
  - Receive Intangibles
  - Mobile Receipt/Acceptance (If SmartApps are licensed)
  - Accept/Reject
  - Assembly

Setup Open Requests/Orders

Any open orders or pending requests can be setup in CAM to complete their procurement in CAM and load the received assets into AssetWorks EAM/FleetFocus using the CAM interfaces. AssetWorks will lead a workshop to guide WVDOT procurement users with setting up manual requests and adding them to open orders matching their current outstanding orders.

The other option is to receive the outstanding orders directly into AssetWorks EAM/FleetFocus and begin a new request/order cycle in CAM. A lot will depend on the timing of the Production module go-live and where WVDOT is in its cycles.

CAM-3.H Procurement Production Go-Live

The final task is the actual production roll-out for each location. This task requires the completion of the production data loading, completion of any pre-production testing, and user training workshops. The CAM system will already be "live" on its production environment after completing Phase 1. At this point the Production Module will be live and used to process requests, manage orders, and receive/accept assets. AssetWorks will provide support to WVDOT as it begins to use the procurement module.

Milestone Responsibility Matrix

CAM-4: Deploy Procurement in Production Milestone

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
CAM-3.A		Procurement Setup and Training	• Conduct procurement workshop to setup and train on current workflows from questionnaires and	• Participate in procurement workshop to setup and train on current workflows from questionnaires and

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
			how to adapt them to CAM	how to adapt them to CAM
CAM-3.B		Customer Procurement Template Setup	• Provide standard load templates for procurement setup	• Complete the templates for all procurement setup • Manually configure functionality not supported with a template
CAM-3.C		Load Test Environment	• Load templates in TEST; see list in section 5.C of SOW	• Review and resolve any errors that come back from loading templates in TEST
CAM-3.D		CAM to AssetWorks EAM/FleetFocus Interface Configuration	• Assist with the install, configure, and test interfaces from CAM to AssetWorks EAM/FleetFocus	• Install, configure, and test interfaces with AssetWorks assistance.
CAM-3.E		Test Procurement Workflows	• Provide test scripts to WVDOT on procurement workflows • Review WVDOT's results and advise on changes needed in application if required	• Test procurement workflows using AssetWorks provide scripts and document results
CAM-3.F		Load Production	• Assist WVDOT in loading templates in PROD; see list in section 5.C of SOW	• Update templates previously used in TEST, post testing phase if required • Load templates in PROD • Review and resolve any errors that come back from loading templates in PROD

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
CAM-3.G		Procurement Production Deployment	• Provide train the trainer user training on procurement functionality	• Designate internal trainers to attend training on procurement functionality
CAM-3.H		Procurement Production Go Live	• AW to support go live cutover	• WVDOT to participate in go live cutover
	CAM-3	**Deploy Procurement in Production Milestone**		

CAM-4 Deployment Phase 3 – Asset Disposal

This is an optional phase that will depend on if CAM will be used to manage all or some of the asset disposal process, or that process will occur in AssetWorks EAM/FleetFocus or another system. Following the Business Process Review, during the future state discussion it will be determined if CAM will be incorporated into the disposal process partially, fully, or not at all. If some or all of CAM will be deployed to support asset disposal, the following tasks will be included.

CAM-4.A Review Disposal Work-Flow

During the initial review of the Implementation Questionnaire and Business Process Review, AssetWorks and WVDOT will have discussed the current workflow for disposing assets. In this workshop, the current process workflow will be reviewed, with focus on how the process must adapt to the CAM functionality, and how CAM workflow will be adapted to the WVDOT workflows. AssetWorks and WVDOT will map out the general process, with WVDOT responsible for fully documenting the process and developing operating procedures in support of the process.

CAM-4.B Setup Disposal Codes and Steps

The CAM disposal process has a series of disposal steps that are linked to a disposal status. The CAM disposal statuses are often linked to the AssetWorks EAM/FleetFocus disposal statuses and life-cycle codes. The disposal codes are setup on code maintenance. The disposal steps use Dates setup on code maintenance as well. AssetWorks and WVDOT will design the workflow for the disposal steps and create the dates needed for each step in the process. The dates will be setup manually.

CAM-4.C Load Disposal Steps to Test

In the test environment, the disposal steps and dates for the base workflow will be setup on a default Category for each of the various disposal processes that may exist. If the process is the same for all types of assets, a default category can be setup and copied with a script. Otherwise, a custom set of scripts will be needed to copy multiple workflows, or all setup manually by WVDOT.

CAM-4.D Test Disposal Processes and Interface

The disposal process can be closely tied into the AssetWorks EAM/FleetFocus disposal process, with CAM or AssetWorks EAM/FleetFocus updating each other when a status changes. This step will require the AssetWorks EAM/FleetFocus CAM Export interface to be setup based on the planned workflow setting the Interface System of Record for each disposal related field. The interface and process will be tested to track an asset through the process in CAM and AssetWorks EAM/FleetFocus to verify that the process works as planned and that the two applications are updated as expected.



CAM-4.E Load Production

Once the testing of the process and interfaces are completed, the CAM production database will be setup. Disposal codes and dates will be manually setup on code maintenance by WVDOT. AssetWorks will provide a script to copy the final disposal steps from test to the production categories.

CAM-4.F Disposal User Training

A training workshop will be provided to CAM users that will have responsibility for managing the disposal process. The training will focus on the following:

- Tracking assets through the disposal steps and changing disposal dates
- Setting up an assets remarketing plan
- Settlement and reconciliation of a disposed asset

CAM-4.G Disposal Go-Live

By this phase, the CAM application is already live. The completion of the disposal step setup and user training will activate the Disposal module in CAM. Users will begin to manage assets through the disposal processes. AssetWorks will provide support as users begin to become familiar with the processes

Milestone Responsibility Matrix

CAM-5: Deploy Asset Disposal in Production Milestone

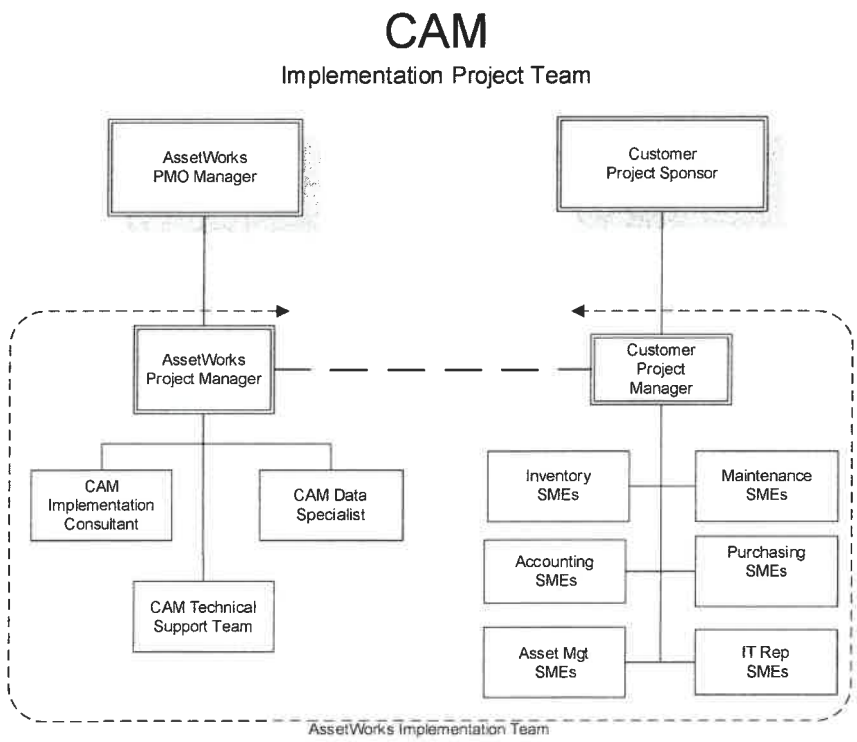
WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
CAM-4.A		Review Disposal Workflow	• Conduct disposal workflow workshop to define and design disposal workflows in CAM	• Participate in disposal workshop and document process and SOPs to support new processes in CAM
CAM-4.B		Setup Disposal Codes and Steps	• Setup disposal codes in CAM one base workflow	• Document decisions made for setup • Manually setup dates for disposal steps
CAM-4.C		Load Disposal Steps to Test	• Load disposal steps to TEST for one base workflow	• If multiple steps are required WVDOT will need to do so manually

WBS #	Milestone #	WBS Activity Name	AW Responsibility	WVDOT Responsibility
				• *Note: a custom script may be able to achieve this
CAM-4.D		Test Disposal Processes and Interface	• Provide test scripts to WVDOT on disposal workflows and interface • Review WVDOT's results and advise on changes needed in application if required	• Test disposal workflows and interface using AssetWorks provide scripts and document results
CAM-4.E		Load Production Environment	• Load disposal steps from TEST to PROD via a script	• WVDOT to manually setup disposal codes and dates in PROD
CAM-4.F		Disposal User Training	• Provide train the trainer user training on disposal functionality	• Designate internal trainers to attend training on disposal functionality
CAM-4.G		Disposal Go Live	• AW to support go live cutover	• WVDOT to participate in go live cutover
	CAM-4	**Deploy Asset Disposal in Production Milestone**		

Project Organization

AssetWorks Project Team

The proposed project team will consist of the following key positions from both organizations:



Project Management Office (PMO) Manager

The AssetWorks Project Management Office Manager will have the ultimate responsibility for the success of WVDOT's implementation. The PMO Manager and will have direct oversight over the Project Manager. The PMO Manager will also review and approve all project billing and is available to meet periodically with WVDOT's executive team to review the project status, discuss challenges facing the project, and identify opportunities to advance the project. The PMO Manager will also be the first to handle any issue escalations, with backup from the Professional Services Manager.

Project Manager

Every AssetWorks software implementation will have a dedicated Project Manager that is assigned to the project from start to finish. The AssetWorks Project Manager is the principal AssetWorks contact and has day-to-day responsibility for the successful completion of the project and will report to the Professional Services Director. The Project Manager is responsible for directing the day-to-day activities of the project and managing the rest of the project team. The Project Manager is responsible for coordinating resources and activities to ensure that the project is completed successfully and on schedule. The Project Manager is also the primary point of contact for the customer.

Project management activities include:

- Develop Program Implementation Schedule
- Coordinate all internal resources necessary for project implementation.
- Monitor quality of performance in design, coding, testing, training, and implementation efforts.
- Support project team inquiries and direct AssetWorks support group efforts, as necessary.
- Provide regular Management Update Reports.

CAM Implementation Consultants

Implementation Consultants are all experienced fleet management and technical professionals that are AssetWorks employees or associated with an AssetWorks business partner that report directly to the Project Manager.

Implementation Consultants are responsible for executing the training plan developed jointly by WVDOT and the AssetWorks project manager, and for assisting WVDOT with setting up and configuring the application. The Implementation Consultants will also assist with the Business Process Review, the work-flow analysis and design, and developing any custom documentation.

Prior to any involvement with WVDOT, the Implementation Consultant will be apprised of any decisions between the Project Manager and WVDOT. This information is critical for them to understand what information should be presented and whether there are any topics that should be avoided related to functionality that the customer will not be implementing.

During any training or configuration session, the Implementation Consultant will keep a log of all pertinent questions that may indicate changes in the direction of the implementation or possible issues. Once a training session is complete, the Implementation Consultant will discuss with the AssetWorks Project Manager the results and any issues that may have occurred. Because the Implementation Consultant typically meets with a larger number of customer personnel, it is important that functionality decisions made outside of any training session be made know to them.

After initial sessions with the customer, it is typical for the customer to contact the Implementation Consultant for either questions or advice on functionality. The Implementation Consultant will communicate back to the AssetWorks Project Manager all discussions.



CAM Data Specialist

The CAM Data Specialist is responsible for completing much of the data loading. Duties include assisting with developing the data conversion plan, writing the conversion scripts, and executing the data loaders. The Data Specialist will be responsible for executing any data loading processes for databases that are hosted by AssetWorks and will provide consulting support to WVDOT resources that will be responsible for loading WVDOT hosted databases.

Technical Engineer

The AssetWorks Technical Engineer is responsible for the initial installation of the system at the customer site. Activities include, loading the test, training, and production databases; configuring application server; installing client workstation software; initial operational system test; and providing technical software installation training to the customer's technical representative.

Software Engineers

Software Engineers are assigned as needed to the project to complete any system modifications, interface programming, and developing custom reports. The Software Engineers work under the direction of the Project Manager and the Director of Technical Services.

Recommended WVDOT Project Team

To best facilitate the implementation, AssetWorks assumes WVDOT will adequately staff the project with sufficient resources to support the project's successful completion and that all appropriate resources will be committed to the project as of the project start date.

AssetWorks recommends that WVDOT resources include:

Executive Steering Committee

The role of the Executive Steering Committee will be to participate in setting the goals and scope of the project and to participate in periodic status meetings with the Project Team. The Steering Committee will provide general project oversight and guidance to the Project Team relative to the organization's overall goals and objectives.

Project Manager

This is the point person within WVDOT who can address specific project issues and serve as the main point of communication between AssetWorks and WVDOT.

Operations Workgroup

A small group of experienced stakeholders from WVDOT that can come together to define what functionality AssetWorks EAM/FleetFocus is to provide; determine what information is to be gathered and how it is to be collected; define the standards for setting up codes and other corporate references, and for developing the standard workflows to rolled-out to each location. A typical customer project team consists of personnel from the following job classifications, although in smaller implementation one individual may represent multiple areas:

- Data Analyst



- Finance/Budget Analyst
- Vehicle and Equipment Engineers/Project Managers
- Asset Procurement Specialist
- Asset Disposal Specialist
- System Administrator
- Training Specialist

It is important that this team remain intact throughout the entire implementation and should attend each training session to obtain a consistent representation during all project tasks.

Training Facilities

AssetWorks will provide on-site training in a classroom environment suitable for training. WVDOT will be responsible for providing and preparing the training facility. AssetWorks recommends class size to not exceed 12 users to ensure proper attention can be given to individual users and maintain the needed pace to ensure training sessions do not run over. The training facility should include hardware comparable to that found in the actual workplace. Some end-user training can take directly in the storerooms or on the shop

Logistical and Scheduling Support

AssetWorks will need assistance from WVDOT to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Assumptions

The following general assumptions apply to this proposed Statement of Work between AssetWorks, LLC (AssetWorks) and (WVDOT):

General

- Professional services for AssetWorks CAM other than custom interfaces, enhancements and existing integrations/initiatives will be provided on a **Fixed Fee** basis.
- All professional services delivered will be invoiced at the beginning of each month following their delivery or per the milestone schedule payments listed above.
- Any onsite services provided are done so as a minimum of three (3) days onsite and require a minimum of eight (8) hours a day to be billed by an AssetWorks' resource or four (4) hours if the resource is available for an additional half day.
- Optional modules purchased after implementation has begun will require a change order or se.parate statement of work for services related to installation, configuration and training.
- Travel expenses will be reimbursed as incurred. Expenses include actual costs for lodging, air and ground travel and per diem rates for meal expenses (corporate rate/government agreement).
- This Statement of Work does not include any costs associated with third party vendors or software not already provided by AssetWorks that may be needed to complete the implementation.
- If this order is abandoned/paused by the WVDOT for any reason mid-effort, the WVDOT will be billed for all AssetWorks time incurred at the current contracted labor rate.

WVDOT Resources

- WVDOT will provide the resources described in this Statement of Work to ensure a successful implementation of the products.
- WVDOT will appoint a single point of contact for the duration of the project. This person should have project management responsibilities and decision-making authority. This person will be the focal point of contact for AssetWorks' Customer Support department.
- All key WVDOT project team resources will be committed to the project as of the project start date.
- WVDOT commits to training appropriate functional and technical resources as required.
- WVDOT is responsible for all manual data entry not included in the data loading process described in this document. This will include loading templates with data not extracted from AssetWorks EAM/FleetFocus
- WVDOT will have all of the necessary and appropriate personnel at all of the meetings for the purpose of defining the requirements of the system.
- AssetWorks will provide on-site training to WVDOT (as outlined above) in a classroom environment suitable for training. AssetWorks recommends class size to not exceed 12 users to ensure proper attention can be given to individual users and maintain the needed pace to ensure training sessions do not run over.
- WVDOT will be responsible for preparing the training facility. The training facility should include hardware comparable to that found in the actual work place. Some end-user training can take directly in the storerooms or on the shop
- All training sessions will be based on standard application training materials. WVDOT will be responsible for customizing training materials to meet its implementation requirements.



- WVDOT will make appropriate technical resources available to AssetWorks' consultants.
- In the event that WVDOT schedules on-site services and due to circumstances within WVDOT's control AssetWorks' scheduled personnel are unable to perform such services, AssetWorks will be entitled to payment for each such scheduled personnel on the basis of an 8-hour day.
- AssetWorks will need assistance from WVDOT to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Infrastructure

- WVDOT will provide a project work area and infrastructure at the centralized implementation location appropriate for the size of the combined WVDOT/AssetWorks project team.
- WVDOT is responsible for providing browser access to the CAM application.

Project Management and Risk Factors

- WVDOT and AssetWorks will agree on scope, services, and deliverables for optional modules and services prior to the Notice to Proceed.
- WVDOT project manager will be responsible for obtaining any required authorizations, approvals and/or signoffs by WVDOT related to project deliverables and project progression in a timeframe in alignment with the project work plan. Delays to this process as well as any WVDOT tasks not completed within the work plan timeframe will be subject to the Change Order Management process, delayed deadlines, and increased services fees.
- This Statement of Work does not include the expenses associated with WVDOT or WVDOT resources assigned to the project.
- WVDOT remains responsible for all integration effort not described in this Statement of Work
- The project schedule is contingent upon the timely attainment of several external milestones that are outside the control of AssetWorks. Examples include but are not limited to the acquisition of the requisite software licenses and hardware and the approval of requisite capital appropriation requests as required.
- Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and WVDOT will discuss these changes in good faith at their earliest opportunity.
- This proposed Statement of Work includes implementation support for only those optional modules, interfaces, and modifications listed in the task list. Any change to the proposed Statement of Work, particularly the implementation services, data conversion, interfaces, and application modifications, will be documented and follow the same procedures for new enhancements or change orders.
- Unless otherwise noted, all integration, enhancement and report development effort quoted in this proposed Statement of Work are an estimate based on AssetWorks' experience providing similar services for other clients based on our current understanding of the requirements. AssetWorks will develop a detailed Development Specification for all services before proceeding with any development.
- This Statement of Work includes services to determine WVDOT's requirements and preparing the development specifications and quotes for only those development items identified in this Statement of Work. Any requirement analysis and specification work for additional items not identified in this Statement of Work would be done on a time and materials basis.

Project Delays

- When Professional Service days are contracted, they are removed from AssetWorks' capacity and considered sold to the customer, and as a result AssetWorks makes financial plans based upon the revenues it expects to achieve from the full performance of the contract. It is impossible for AssetWorks to know in advance whether or under what circumstances it would be able to resell the service days if the customer does not use them, either as the result of delaying or canceling meetings, tasks or deliverables.



In most instances, when customers do not use the contracted time, AssetWorks is unable to resell those days or services. Even when days or services may be resold, it is costly to re-market the services, and such efforts divert effort to do so. While customer days have been held out of AssetWorks' capacity planning, AssetWorks may have turned away or delayed the start of other customers in order to meet AssetWorks' commitment to the customer. For these reasons, AssetWorks and the customer agree that in the event of delay or cancellation of scheduled project tasks and meetings at the customer's request within two weeks of execution, AssetWorks shall be due compensation equal to the contracted amount to deliver the services cancelled including any travel expenses incurred in preparation for the delayed or cancelled services.

Travel

- AssetWorks will bill WVDOT for all expenses for travel on-site to provide planned services for which WVDOT is not prepared to support (e.g. Meeting canceled due to weather; schedule participants are unavailable, scheduled facility is unavailable, etc.)
- If AssetWorks is requested to make additional last minute on-site visits beyond those identified in the Statement of Work, AssetWorks may invoice WVDOT for additional costs incurred due to late bookings and availability.
- All travel costs provided in this Statement of Work are estimates and subject to revision based on actual airline, hotel, rental car and local market conditions.

Logistical and Scheduling Support

- AssetWorks will need assistance from WVDOT to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Procedures for Handling Change Orders

If there is a change to the scope, or additional requirements to the project, these will be documented in the project change log, and the AssetWorks PM will review these potential changes with the WVDOT PM to determine the need and priority for the change. If the change is something that will be required, then the next determination would be who will be responsible for executing the change, if the change will result in a change of scope requiring additional support or effort from AssetWorks a formal change order request will be developed and provided to WVDOT for review and approval to be added to the scope of work. Any changes to the scope of work will be reflected in the project decision log and will result in updates to the project scope of work, schedule, and budget, including the addition of any additional milestones. Only after all parties agree on the need for the change, and the plan for integrating the change into the overall implementation project plan, would AssetWorks begin work on this change.

Sole Source Provider

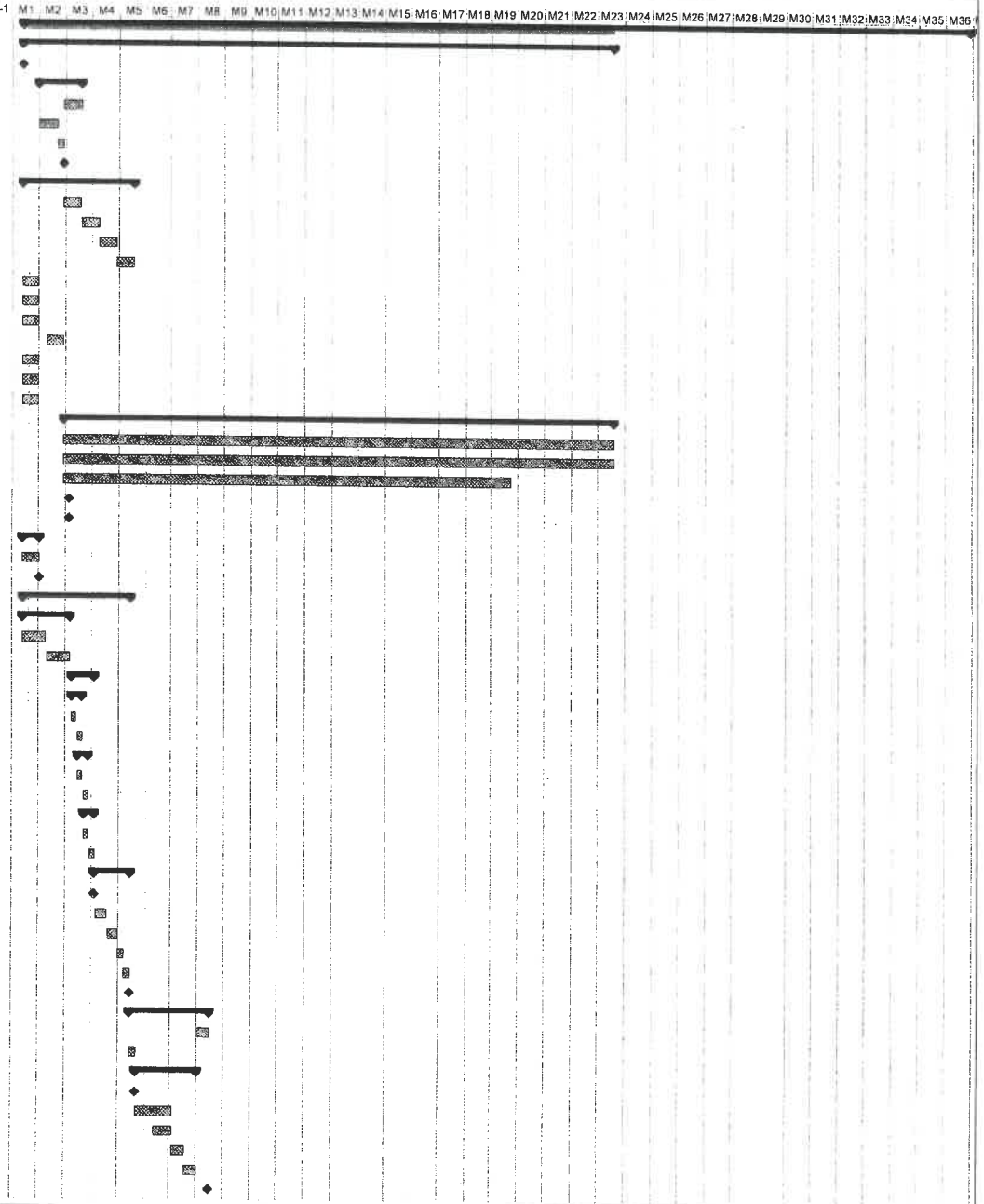
AssetWorks is the author, owner, distributor and sole source provider of fleet management software, professional services and maintenance services for the AssetWorks EAM/FleetFocus™ family of products which includes AssetWorks EAM/FleetFocus, FA, M5, MCMS, M4 and AssetWorks EAM/FleetFocus™. Use of the products is subject to the Software License Agreement. AssetWorks is solely authorized or certified to provide this service.

Confidentiality

This proposed Statement of Work (SOW) contains CONFIDENTIAL INFORMATION of AssetWorks, Inc. In consideration of the receipt of this document, WVDOT agrees to not reproduce or disclose this information except to WVDOT employees directly involved on a "Need to Know" basis.

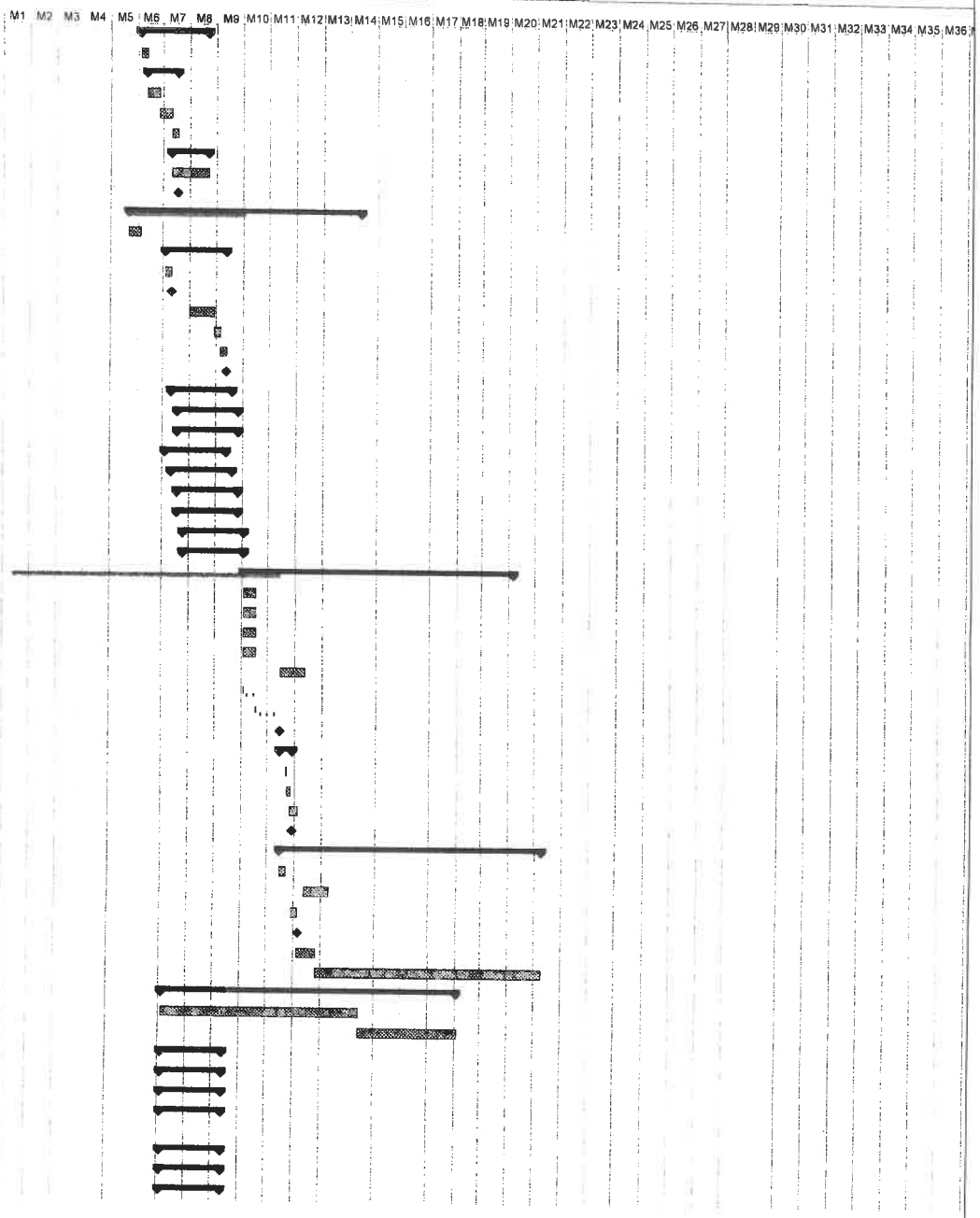
FleetFocus Implementation

ID	WBS	Task Name	Duration
1	A	**West Virginia DOT FleetFocus Implementation**	**774 days**
2	A.1	**Project Management and Oversight Services**	**482 days**
3	A.1.1	***Notice to Proceed***	0 days
4	A.1.2	**Project Kick-Off Services**	**35 days**
5	A.1.2.1	Initial Project Work Plan (project plan)	15 days
6	A.1.2.2	Project Preparation and Kick-off Planning	15 days
7	A.1.2.3	On-Site Project Kick-Off Meeting	5 days
8	A.1.3	***Complete Project Kick-Off Meeting***	0 days
9	A.1.4	**Project Management Plan**	**91 days**
10	A.1.4.1	Project Management Plan	14 days
11	A.1.4.2	Quality Management Plan	14 days
12	A.1.4.3	Knowledge Transfer Plan	14 days
13	A.1.4.4	Stakeholder Engagement Plan	14 days
14	A.1.4.5	Organizational Change Management (OCM) Plan	14 days
15	A.1.4.6	Master Test Plan	14 days
16	A.1.4.7	Data Conversion Plan	14 days
17	A.1.4.8	Interface Plan	14 days
18	A.1.4.9	Training Plan	14 days
19	A.1.4.10	Go-Live Deployment Plan	14 days
20	A.1.4.11	Post Go-Live Plan	14 days
21	A.1.5	**Project Management - Montitoring & Control**	**448 days**
22	A.1.5.1	Project Work Plan Updates	448 days
23	A.1.5.2	Bi-Weekly Status Meetings	448 days
24	A.1.5.3	Continued Project Monitoring and Controlling Services	365 days
25	A.2	**Hardware Acquisition Services**	**0 days**
26	A.2.1	Procure necessary hardware	0 days
27	A.3	**Software Application Installation Services**	**15 days**
28	A.3.1	Create FleetFocus database and install applications	15 days
29	A.3.2	***Complete Software Install***	0 days
30	A.4	**Functional Design Services**	**89 days**
31	A.4.1	**Initial Requirements Assessment**	**40 days**
32	A.4.1.1	Fit/Gap Report	20 days
33	A.4.1.2	Requirements Traceability Matrix	20 days
34	A.4.2	**Business Process Design Workshops**	**20 days**
35	A.4.2.1	**Asset and Fuel Management Processes**	**10 days**
36	A.4.2.1.1	Workshop - Asset Management On-site	5 days
37	A.4.2.1.2	Document asset management findings	5 days
38	A.4.2.2	**Maintenance Management Processes**	**10 days**
39	A.4.2.2.1	Workshop - Maintenance Management On-site	5 days
40	A.4.2.2.2	Document maintenance management findings	5 days
41	A.4.2.3	**Inventory Management Processes**	**10 days**
42	A.4.2.3.1	Workshop - Inventory Management On-site	5 days
43	A.4.2.3.2	Document inventory management findings	5 days
44	A.4.3	**Complete Functional TO BE documentation**	**29 days**
45	A.4.3.1	Checkpoint - Interviews complete	0 days
46	A.4.3.2	Prepare and submit preliminary Functional TO BE report	10 days
47	A.4.3.3	Checkpoint - Review of preliminary findings	9 days
48	A.4.3.4	Review of proposed Functional TO BE Solution (CRP) On-site	5 days
49	A.4.3.5	Complete and submit final Functional TO BE report	5 days
50	A.4.3.6	Checkpoint - Acceptance of report	0 days
51	A.5	**System Design Services**	**65 days**
52	A.5.1	Document System Design Guide	10 days
53	A.5.2	Provide system setup consulting	5 days
54	A.5.3	**Configure System**	**50 days**
55	A.5.3.1	***System setup consulting complete***	0 days
56	A.5.3.2	Finalize data elements, coding, and work flow	30 days
57	A.5.3.3	Configure modules	15 days
58	A.5.3.4	Configure EDGE	10 days
59	A.5.3.5	Configure Motor Pool and Reservations	10 days
60	A.5.4	***FA System Design Guide***	0 days



FleetFocus Implementation

ID	WBS	Task Name	Duration
61	A.6	**Data Conversion Services**	55 days
62	A.6.1	Batch process training	5 days
63	A.6.2	**Load Operational System Data**	25 days
64	A.6.2.1	Load equipment master records 2x	10 days
65	A.6.2.2	Load part master records 2x	10 days
66	A.6.2.3	Load summary cost history 2x	5 days
67	A.6.3	**Historical Data Conversion Services**	30 days
68	A.6.3.1	Load Historical Work Order Data (3 years) - 2x	30 days
69	A.6.4	***Data loaded for testing***	0 days
70	A.7	**Technical Services**	189 days
71	A.7.1	Overview Sessions of Unit Testing and Interace Programs	10 days
72	A.7.2	**FA - Asset Create Interface - wvOASIS Advantage Financials to FA**	50 days
73	A.7.2.7	Finalize technical specification	5 days
74	A.7.2.8	***Approve interface specification***	0 days
75	A.7.2.9	Build interface	20 days
76	A.7.2.10	Conduct unit test of interface	5 days
77	A.7.2.11	Install and conduct integrated test	5 days
78	A.7.2.12	***Interface delivered***	0 days
79	A.7.3	**FA - Asset Create/Update Interface - FA to BRIM**	50 days
86	A.7.4	**FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials**	50 days
93	A.7.5	**FA - Labor output from wvOASIS to FA for purpose of outputting Billing**	50 days
100	A.7.6	**FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA**	50 days
107	A.7.7	**FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface**	50 days
114	A.7.8	**FA - Asset Create/Update Interface - FA to Fuel Master**	50 days
121	A.7.9	**FA - External Fuel Interface - Fuel Master to FA**	50 days
128	A.7.10	**FA - Asset Create/Update and Work History on Asset - DOA to FA**	50 days
135	A.7.11	**FA - Billing Module Output Interface File - FA to DOA**	50 days
142	A.8	**Testing Services**	219 days
143	A.8.1	System Test Report	10 days
144	A.8.2	Integration Test Report	10 days
145	A.8.3	Security Test Report	10 days
146	A.8.4	Performance Test Report	10 days
147	A.8.5	Provide and update standard training materials with workflow modifications	20 days
148	A.8.6	Provide pre-training to support Test Plan	10 days
149	A.8.7	Assist Customer in their Test Plan Execution	20 days
150	A.8.8	***Testing complete***	0 days
151	A.9	**Training Services**	10 days
152	A.9.1	Prepare for Training	1 day
153	A.9.2	Provide training to system administrators	2 days
154	A.9.3	Provide end user training	7 days
155	A.9.4	***Training Complete***	0 days
156	A.10	**Production Roll-Out Services**	212 days
157	A.10.1	Prepare Enterprise Readiness Plan	5 days
158	A.10.2	Provide OCM Support/Materials	20 days
159	A.10.3	Prepare for cut-over	5 days
160	A.10.4	***Commence Live Operations***	0 days
161	A.10.5	Provide initial deployment support	15 days
162	A.10.6	Extended post-implementation support (26 weeks)	182 days
163	B	**CAM Implementation Services**	240 days
164	B.1	Phase 1 - Assets, Analytics and Planning Deployment	160 days
165	B.2	Phase 2 - Procurement & Disposal Deployment	80 days
166	B.3	**CAM Interfaces**	50 days
167	B.3.1	**CAM - CAM Requisition to wvOASIS Advantage Financials Interface**	50 days
174	B.3.3	**CAM - CAM Requisition to wvOASIS Advantage Financials Interface**	50 days
181	B.3.2	**CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface**	50 days
194			
195	C	**Optional Integration Services**	50 days
196	C.1	**Accounts Interface wvOASIS to FA**	50 days
203	C.2	**Vendors Interface wvOASIS to FA**	50 days



TAB 11: REQUIREMENTS MATRIX RESPONSES

Please see the following pages

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: AssetWorks LLC

Authorized Signature: [signature] Date: 13 Sep 2021

State of PA

County of Chester, to-wit:

Taken, subscribed, and sworn to before me this 13 day of Sept, 2021.

My Commission expires 30 Sept, 2021.

AFFIX SEAL HERE

NOTARY PUBLIC [signature]

Commonwealth of Pennsylvania
NOTARIAL SEAL
JUDITH L. SONS, NOTARY PUBLIC
TredyfferinTownship,ChesterCounty
My Commission Expires September 30, 2021

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

Pursuant to *W. Va. Code* § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of $1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

"Interested party" or *"Interested parties"* means:

(1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
(2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
(3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

Revised June 8, 2018

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

(Required by *W. Va. Code* § 6D-1-2)

Name of Contracting Business Entity: AssetWorks LLC **Address:** 998 Old Eagle School Rd #1215 Wayne, PA 19087

Name of Authorized Agent: Robert Hallett **Address:** same

Contract Number: TBA **Contract Description:** Implementation of FleetFocus solution

Governmental agency awarding contract: _____

☐ **Check here if this is a Supplemental Disclosure**

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below *(attach additional pages if necessary)*:

1. **Subcontractors or other entities performing work or service under the Contract**
   ☒ Check here if none, otherwise list entity/individual names below.

2. **Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**
   ☒ Check here if none, otherwise list entity/individual names below.

3. **Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**
   ☒ Check here if none, otherwise list entity/individual names below.

Signature: Robert Hallett Date Signed: 13 Sep 2021

Notary Verification

State of Pennsylvania, County of Chester:

I, Robert Hallett, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 13 day of Sept, 2021.

Judith L Sons
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

Commonwealth of Pennsylvania
NOTARIAL SEAL
JUDITH L. SONS, NOTARY PUBLIC
TredyfferinTownship,ChesterCounty
My Commission Expires September 30, 2021

Revised June 8, 2018

APPENDIX:

AssetWorks Data Center Overview
AssetWorks System Requirements and Compatibility (for on-premises installs)
AssetWorks Resumes (representative)

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

AssetWORKS

ABOUT THE ASSETWORKS DATA CENTER

AssetWorks has over 20 years' experience managing the hardware, operating system, database management system and application environments required for the development, testing, training, and production support of its client server and web-based applications. This experience has been built over the years through 24x7 customer service and Information Technology back-office support for our hosted services customers. In 1997, AssetWorks, with its solution FleetFocus, became the first in the Fleet Enterprise Asset Management (EAM) industry to offer hosting services as an Application Service Provider (ASP) to our valued client-partners. AssetWorks provides hosting services for our entire suite of Enterprise Asset Management ('EAM') applications including FleetFocus, FuelFocus, CAM, EAM, FSS (Field Services Solutions), Integrated Workplace Management and Fixed Asset Management. As testament to over a decade of service, AssetWorks can claim both private and public sector organizations as satisfied customers including a number of agencies within the federal government.

BENEFITS OF HOSTED SERVICES

- Eliminates the initial outlay of capital for hardware, database, and operating system software
- Improves the level of application support AssetWorks can provide in support of your implementation
- Minimizes the cost to train and retain highly skilled technical staff
- Removes the responsibility for ongoing application support and maintenance from your IT staff
- Allows you to budget for a predictable cash flow for IT expenditures

AssetWorks employs database and IT infrastructure subject matter experts who manage our server and network infrastructure and provide performance monitoring and tuning services for the application and database servers, as well as for the network and communications infrastructure.

Moreover, our team supports these enterprise systems using "best practices" ***system management controls*** for critical aspects of IT support such as capacity management, change management, performance management, and problem management. ***Security*** for our customers and their data is also of paramount importance to us. We have established extensive policies and methodologies for system security including, but not limited to, restricted physical access to all hardware; multiple sets of firewalls; proxies, authenticated VPN sessions, and active change control processes.

AssetWorks has proven expertise in providing strategy and execution of single and multiple server environments based on our extensive IT experience. Our Data Center staff manages multiple upgrade, development, and production environments for more than 145 diverse organizations, including both small and large enterprise customers. Our hosting experience extends from small local governments with fewer than 300 vehicle equipment units to enterprise-wide implementations with more than 75,000 vehicles and 1,500 users.



AssetWorks has garnered this high level of trust from our customers because of both our experience and professionalism and our comprehensive Security Management and Disaster Recovery Plan. Since September 2006, and with annual renewals since then, the AssetWorks Data Center in eastern Pennsylvania maintains SSAE18-SOC 2 certification status by the independent auditing firm of Lurie LLP. The SSAE18-SOC 2 is an auditing standard designed to enable an independent auditor to evaluate and issue an opinion on a service organization's controls. The audit report (i.e. the service auditor's report) contains the auditor's opinion, a description

AssetWORKS

of the controls placed in operation, and description of the auditor's tests of operating effectiveness. In the case of the AssetWorks Data Center, the organizational controls, application development and maintenance controls, logical security and access controls, data processing controls and business continuity controls all were designated as meeting or exceeding standards. The standards are those set forth by the Information Systems Audit and Control Association (ISACA) and approved by the Public Company Accounting Oversight Board (PCAOB).

Additionally, the AssetWorks Data Center, and specifically the controls exhibited and enforced on the ASP (Application Service Provider) environment, has been granted the designation "Authorized to Operate" (ATO) as a system housing CUI (Controlled Unclassified Information) data at our facility based on the DOJ assessment using NIST 800-53 guidelines for FISMA (Federal Information Standards Management Agency) standards. This independent audit and subsequent designation was conducted by the Department of Justice (DOJ) at the request of the Department of Homeland Security (DHS), a current AssetWorks ASP customer.

These certifications ensure that **AssetWorks has in place all policies and procedures to make your data safe**. We operate our Data Center in the highest standards demanded by our customers including:

- The AssetWorks Data Center is designated a Tier 3 facility as defined by the Uptime Institute and provides operational and environmental redundancy:
  - 2N power distribution systems provide diversified power
  - High level of security through mantrap with dual factor, biometric access control and closed circuit video surveillance
  - Carrier-neutral facility with I3 on-premises carriers
  - Managed dark fiber, high-speed fiber optic network within facility provides access to service provider secure WAN
  - Custom built mass air units condition data centers with green energy technologies
- Cloud back-up storage redundancy
- Security monitoring
- Tiered firewalls and data encryption
- Dedicated hardware and networks
- Data back ups retained for 90 days standard
- Disaster Recovery Plan in place

AssetWorks has developed Service Level Agreements specific to the hosting of application suites. Each Service Level Agreement starts with a baseline agreement that is tailored to meet the unique needs and requirements of each customer. To help customers evaluate the service level actually provided, AssetWorks provides regular benchmarks and metrics to its hosted customers regarding application and network performance. As part of the standard hosting services provided, AssetWorks will maintain the database and application servers, as well as the network infrastructure required for operation and connectivity to the Internet (or customer Intranet, as an option). AssetWorks will provide the server operating system and RDBMS licenses, including maintenance for those systems, and required back-office maintenance and support of server hardware, including database back-ups (including cloud storage) and disaster preparedness tasks (including recovery training and testing).

The AssetWorks Data Center

AssetWORKS

The AssetWorks Data Center Disaster Recovery (DR) Response Plan offers the following service to our customers:

DISASTER RECOVERY

Disaster Recovery is available to all hosted customers. This service involves backing up and recovering the customer database and attachments to the Disaster Recovery Site (DRS) as well as providing the FleetFocus application in a configured Disaster Recovery Site.

- AssetWorks contracts with an offsite, secure facility to store the latest version of database backup files and attachments.
- AssetWorks contracts with a provider to have an off-site server standing ready to restore our backups.
- In the event of an incident, latest off-site database archives are stored at off-site DRS facility.
- The FleetFocus application server software is maintained as 'current' in the DRS to be compatible with the working version in the Data Center.
- The FleetFocus database server configuration (tnsnames, websites, etc.) is also kept current in the DRS to be compatible with the working version in the Data Center.
- Any attachments on the application server will be restored on the DRS application servers.
- DNS changes would make the FleetFocus DRS application available through the customers URL.
- RTO (Recovery Time Objective) is a target of 48 hours with a maximum of 4 days.
- RPO (Recovery Point Objective) is under one minute.

OPTIONAL ENHANCED DISASTER RECOVERY

For customers for whom the RTO of four (4) days is insufficient, a quote can be provided for the required RTO; i.e. near real-time or fewer than four days.

AssetWORKS

FASuite™

System Requirements and Compatibility

Version 21.0.x | May 2021

Software Compatibility

Databases

	Oracle 11g R2	Oracle 12c R1	Oracle 12c R2	Oracle 18*	Oracle 19	MSSQL 2008 R2 SP3	MSSQL 2012 SP4	MSSQL 2014 SP2	MSSQL 2016 SP1	MSSQL 2017	MSSQL 2019
18.0.x	x	x	x			x	x	x	x	x	
19.0.x	x	x	x			x	x	x	x	x	
19.1.x			x	x			x	x	x	x	x
20.0.x			x	x	x			x	x	x	x
20.1.x			x	x	x			x	x	x	x
21.0.x				x	x			x	x	x	x

Database Tier Network Protocol Support

All network protocols supported by Oracle SQL (.NET and/or MSSQL)

Database Tier Operating System Support

Any OS supported by Oracle or MS SQL Server.

Oracle Authentication Protocol

Authentication above version 11 is not supported. Add SQLNET.ALLOWED_LOGON_VERSION_SERVER = 11 to all server sqlnet.ora files.

*Oracle 18 is at End of Life by Oracle by July 2021 and will no longer be supported by AssetWorks past this date, for any reason.

Application Servers

	Application Servers				
	32-bit Windows 2008	64-bit Windows 2008 R2	64-bit Windows 2012 / 2012 R2	64-bit Windows 2016	64-bit Windows 2019
18.0.x	x	x	x	x	
19.0.x			x	x	
19.1.x			x	x	x
20.0.x			x	x	x
20.1.x			x	x	x
21.0.x			x	x	x

	HTTP Servers		
	Microsoft IIS 8	Microsoft IIS 8.5	Microsoft IIS 10
18.0.x	x	x	x
19.0.x		x	x
19.1.x		x	x
20.0.x		x	x
20.1.x		x	x
21.0.x		x	x

Application Tier Network Protocol Support

All network protocols supported by Oracle SQL **Net and/or MSSQL*

Operating Systems & Browsers

Operating Systems

Supported for use of Graphical User Interface (GUI)

	64-bit Windows 8.1	64-bit Windows 10
18.0.x	x	x
19.0.x	x	x
19.1.x	x	x
20.0.x	x	x
20.1.x	x	x
21.0.x		x

Graphical User Interface Network Protocol Support

All network protocols supporting TCP/IP

Browser Versions

Supported for use of Web Modules on both Desktop and Tablet Operating Systems

	IE 11	Edge Chromium	Chrome
18.0.x	x		x
19.0.x	x		x
19.1.x	x	x	x
20.0.x	x	x	x
20.1.x	x*	x	x
21.0.x		x	x

Primary certifications performed in Windows-based desktop operating system environments. Other supported operating systems or platforms may have specific limitations per-device based on hardware or software.

Internet Explorer compatibility mode is not supported.

Firefox has known compatibility issues and is not recommended.

*Mapping is not supported if using IE11.

Security

TLS Protocols

The latest TLS protocols are recommended to ensure safety of data. Verify that secure software runs using TLS 1.2.

Single Sign-On Methods

	Integrated Windows Authentication	Central Authentication Service (CAS)	CA Site Minder / OpenID	Active Directory Federation Services (ADFS)	Shibboleth	Azure Active Directory (Azure AD)	LDAP Authentication
18.0.x	x	x	x	x	x	x	
19.0.x	x	x	x	x	x	x	x
19.1.x	x	x	x	x	x	x	x
20.0.x	x	x	x	x	x	x	x
20.1.x	x	x	x	x	x	x	x
21.0.x	x	x	x	x	x	x	x

* Azure Active Directory 17.0.6 and forward.

Python

Python scripts are supported in a 32-bit installation of the application server and will not work if using the 64-bit application option available when installing. For anyone using Python scripts within the application, the application must be installed in 32-bit.



For more information on installing the 32- or 64-bit application, refer to the Application Installation – Installing and Enabling Access.

Reporting Servers

	Crystal Reports 2013 SP9	Crystal Reports 2016 SP7
18.0.x	x	
19.0.x	x	
19.1.x	x	
20.0.x		x
20.1.x		x
21.0.x		x

- To use the Reporting modules (both external and internal reporting) version 18 and forward, you must upgrade the Crystal Reports Runtime components to match the Crystal Reports server.
- **Important:** Two versions of Crystal cannot be installed side by side. Therefore, the Enterprise Asset Management software cannot be run on the same server box (or VM) concurrently with any other versions of this application.

Hardware Requirements

Server Specifications

The following tables highlight the server hardware specifications for a standard small, medium or large operation.

The size of your operation is based on the number of concurrent users, number of active assets, and other variables specific to your organization. The sizes defined below are based on active assets. For a specific sizing evaluation, contact a company representative familiar with your configuration.

Hardware Requirements – Small Operation

For operations which are Fleet only or less than 1000 active assets

	CPU	Cores	RAM	Storage Space	Network Card
Application/Web, Reporting, Integration Server	2.4GHz	Quad	8GB	100GB	1Gbps
*The Application/Web, Reporting and, in some cases, the Integration Server are often combined onto one machine for smaller operations. For Organizations utilizing Advanced Indexing, use at a minimum the configuration recommended for Medium Operations. This configuration is not recommended.					
Database Server	2.4GHz	Quad	8GB	100GB	1Gbps

Hardware Requirements – Medium Operation

For operations utilizing Mapping or more than 10 active integrations

	CPU	Cores	RAM	Storage Space	Network Card
Application/Web Server	2.4GHz	Quad	64GB	120GB*	1Gbps
Reporting Server	2.4GHz	Quad	8GB	50GB	1Gbps
Integration Server	2.4GHz	Quad	16GB	100GB	1Gbps
Database Server	2.4GHz	6	32GB	250GB	1Gbps

*Users may need additional storage space for the Application/Web Server depending on the size and amount of files that will be uploaded.

For any organization using Advanced Indexing, a minimum of 32GB of RAM is required on the server, which is assumed to be the Application/Web Server for the purpose of this guide. If not utilizing this feature, or in a Test environment, 16-32GB may meet organizational needs.

Hardware Requirements – Large Operation

For operations that:

- **Have over 100,000 assets and utilize Mapping**
- **Have more than 100 active Locations**
- **Have a larger fleet with an asset count of 200 or more**
- **Have more than 20 active MAXQueue integrations**

	CPU	Cores	RAM	Storage Space	Network Card
Application/Web Server*	2.4GHz	Quad	64GB	250GB**	1Gbps
Reporting Server	2.4GHz	Quad	16GB	100GB	1Gbps
Integration Server	2.4GHz	Quad	32GB	150GB	1Gbps
Database Server	2.4GHz	8	32GB	500GB	1Gbps

*Minimum of two servers with an installation of app and web on each. For any organization using Advanced Indexing, a minimum of 32GB of RAM is required on the server, which is assumed to be the Application/Web Server for the purpose of this guide.

If your organization has over 10,000 assets, please consult prior to purchase of hardware for recommendations based upon your expected usage.

**Users may need additional storage space for the Application/Web Server depending on the size and amount of files that will be uploaded.

Utilization of a load-balancer appliance is recommended for operations of this size.

Hardware

Workstation Recommendations

- Microsoft Windows Workstation (Laptop or Desktop) with supported Operating System and compatible/supported browser.
- Minimum Monitor Resolution 1024 x 768
- 10/100/1000 Mbps Ethernet NIC

Laser Wedge Scanners

- DataLogic Gryphon
- QuickScan I QM2400
- PS/2, AT and USB

Label Printers

- Intermec printers supporting the IPL programming language.
- All Zebra printers supporting the ZPL and EPL programming languages

Mapping and GIS Requirements

The following tables reflect supported providers for 17.0.5 and forward. Please note that prior to 17.0.5 Esri was the only tile provider supported and recommended for both web and mobile applications.

These services are not owned or maintained by AssetWorks, as such we cannot guarantee their performance or availability.

Tile Services

Map Tile Provider	Supported in Web	Mobile Connected	Mobile Disconnected	Licensing Requirements
Bing	x			Requires a Bing Maps Enterprise License (provides access to the required Bing Maps Enterprise Key) To obtain a license see Microsoft's Licensing Options page at: https://www.microsoft.com/en-us/maps/licensing For complete terms see: https://www.microsoft.com/en-us/maps/product/terms
Esri	x	x	x	ArcGIS Server – Standard or Advanced Edition (**not** Basic). Version 10.3 or above - up to 10.8 To obtain see: https://enterprise.arcgis.com/en/
Mapbox	x	x	x	Requires Service Key and Client ID.
OpenStreet Map (OSM) Test only. Not for use in production	x	x	x	Use of this free service must adhere to the provider's title policy which does **not** allow the usage of their service in a production environment.

The use of tile services that does not adhere to the provider's service usage policy is not supported. Organizations that use map services are expected to research and obtain any necessary licenses and to comply with all restrictions and limitations imposed by those services.

Geocoding Services

Geocoding Provider	Supported in Web	Mobile Connected	Mobile Disconnected	Licensing Requirements
Esri	x	x	x	ArcGIS Server – Standard or Advanced Edition (**not** Basic). Version 10.3 or above - up to 10.5.1 To obtain see: https://enterprise.arcgis.com/en/

End of Customer Support Notices

End of Support Date	Software Version
June 30, 2006	FleetFocus 5.3 and earlier (Including Fleet Management and FleetAnywhere, RailFocus, EquipmentFocus, LinearFocus) InfoCenter 1.2.x and earlier
Jan. 31, 2008	MobileFocus 3.x
June 30, 2008	MobileFocus 4.x
Dec. 31,2008	App 5.4.x – 5.6.x, InfoCenter 1.4.x and earlier
June 30, 2010	App 5.7.x
Dec. 31, 2010	FASuite App 5.8.x, InfoCenter 1.5.x
Dec. 31,2011	FASuite App 6.0.x, InfoCenter 1.6.x, MobileFocus 5.3
Dec. 31, 2012	FASuite App 6.1.x, InfoCenter 1.7.x
June 30, 2013	FASuite App 6.2.x, InfoCenter 1.8.x
Dec. 31, 2013	FASuite App 6.3.x, InfoCenter 1.9.x, MobileFocus 5.4
Dec. 31, 2014	FASuite App 6.4.x, InfoCenter 2.0.x
June 30, 2015	FASuite 12.0.x
Dec. 31, 2015	FASuite 12.1.x
June 30, 2016	FASuite 13.0.x
Dec. 31, 2016	FASuite 13.1.x
Dec. 31, 2017	FASuite 14.0.x
Dec. 31, 2018	FASuite 15.0.x
Sept. 1, 2019	FASuite 16.0.x
Dec. 31, 2020	FASuite 17.0.x, All MobileFocus Pocket PC Handheld Versions
Dec. 31, 2021	FASuite 18.0.x
June 30, 2022	FASuite 19.0.x
Dec. 31, 2022	FASuite 19.1.x
June 30, 2023	FASuite 20.0.x
September 30, 2023	FASuite 20.1.x
April 30, 2024	FASuite 21.0.x

Product	No Longer Supported in Version:
Windows 2000 Server Oracle 8.1.5+ Oracle 9.x MSSQL 2000	FASuite 6.3 and greater
Crystal Reports XI	FASuite 6.4 and greater
Internet Explorer 6 MobileFocus 5.4	FASuite 12.0 and greater
Windows XP Windows Server 2003 Oracle 10g R2 MSSQL 2005 Internet Explorer 7 Crystal Reports 2008 800x600 GUI Resolution	FASuite 15.0 and greater
Internet Explorer 8 Windows Vista Windows 7	FASuite 16.0 and greater
Internet Explorer 9 Internet Explorer 10	FASuite 17.0 and greater
Crystal Reports 2013 SP4 Oracle 11g R1	FASuite 18.0 and greater
Oracle 11g R2, 12C R1 MSSQL 2008 R2 SP3	FASuite 19.1 and greater
Internet Explorer 11	FASuite 21.0 and greater
Classic Purchasing (CENTRALLY or BY LOCATION) is now a legacy feature*	FASuite 21.1 and greater – A code will be required to continue use of certain legacy features

*It is recommended to migrate away from legacy features, as support for these features will cease in a future version. Contact Customer Care for further information about migration options.

Charlene Kiss, PMP©

Project Director
2016 - Present

Introduction

Charlene Kiss is a PMP© certified project management professional with more than 16 years of experience leading large and small projects that support business- and operations-oriented software technology and database integration solutions. She specializes in project management, supporting the definition, development, and delivery of complex software solutions that range in size and scope from several hundred thousand to tens of millions of dollars in delivered project value. Ms. Kiss works with both public and private sector customers to implement the AssetWorks FleetFocus solution.

Major Projects

BELL CANADA | *Montreal, Quebec, Canada*

- Successfully implemented AssetWorks FleetFocus, which included 15,000+ vehicles maintained at 47 maintenance facilities, in a multi-language environment
- Developed and oversaw the system configuration, workflow process design, legacy data migration, and training
- Managed high volume of complex custom enhancements including software modifications and interfaces with 3rd party applications

CITY OF VANCOUVER | *Vancouver, BC, Canada*

- Successfully implemented AssetWorks FleetFocus, which included 3,100+ vehicles and 2,400+ small equipment and tools
- Developed and oversaw the system configuration, legacy data migration and training
- Assisted with current workflow analysis to redefine, document and implement future state workflow processes for end users
- Managed several complex custom enhancements including software modifications and interfaces with 3rd party applications

Other Satisfied AssetWorks Clients

MIDAMERICAN ENERGY | *Sioux City, IA*

- Successfully implemented AssetWorks FleetFocus, which included 4,000+ vehicles
- Developed and oversaw the workflow design, legacy data migration, and training
- Integrated an Oracle Inventory as well as WEX Commercial Fuel interface

PENNSYLVANIA: STATE POLICE | *Harrisburg, PA*

- Successfully implemented AssetWorks FleetFocus, which included 3,000+ vehicles
- Developed the Business Process Analysis and workflow design and migrated legacy data
- Managed third-party integrations with financial, HR, and purchasing systems
- Charge-back rate structures.

Education/Certifications

- **BACHELOR OF SCIENCE: BUSINESS ADMINISTRATION**
  - Major in Accounting
  - Minor in Management Information Systems
  - University of Nebraska at Omaha, 1997
- **CERTIFIED PROJECT MANAGEMENT PROFESSIONAL**
  - Project Management Institute, 2012

Skills

- **PROJECT MANAGEMENT**
  - Budget Forecasting
  - Requirements Analysis
  - Business Process Assessment
- **ENTERPRISE-WIDE IMPLEMENTATIONS**
- **SOFTWARE**
  - Training
  - Setup
  - System Upgrades
- **DATA**
  - Migrations
  - Conversions
  - Integrations

Prior Experience

- **PROJECT MANAGER**
  - Newscycle Solutions, 2013 – 2016
- **PROJECT MANAGER**
  - Atex, Inc., 2007 – 2013

Gary Frost

Senior Project Manager
2000 - Present

Introduction

Gary Frost has over 20 years of experience in software development, management, and training on behalf of AssetWorks. His range of project experience includes data conversion from legacy systems, Oracle and MS SQL Server database installations and post-implementation consulting. He provides consultation services for best business practices and develops timeline requirements and customized training documentation. Mr. Frost designs, develops, and implements third-party software interfaces, custom reports, and applications using Oracle, Excel, Access, and MS SQL Server.

Major Projects

UNITED STATES MARINE CORPS | *Washington, DC*

- Successfully implemented AssetWorks FleetFocus (14,000+ vehicles)
- Developed customer-specific business processes to gather and export data to various military and government oversight agencies
- Worked with the USMC to configure the FleetFocus security module to encrypt data

STATE OF WASHINGTON DES | *Olympia, WA*

- Successfully implemented AssetWorks FleetFocus (4,000+ vehicles & 12,000+ pieces of equipment)
- Implemented the Motor Pool module for online vehicle reservations

PEPSI BEVERAGE COMPANY | *Somers, NY*

- Successfully implemented AssetWorks FleetFocus (44,000+ vehicles)
- Provided training to fleet and business unit managers for each of Pepsi's 10 business units (suggestions for business process reengineering, best practices, and implementation oversight)

Other Satisfied AssetWorks Clients

- **STATE OF WISCONSIN | Madison, WI**
- **COUNTY OF SONOMA** | *Santa Rosa, CA*
- **COUNTY OF SAN JOSE** | *San Jose, CA*
- **CITY OF SEATTLE** | *Seattle, OR*
- **EUGENE WATER AND ELECTRIC BOARD** | *Eugene, OR*
- **CITY OF LIVERMORE** | *Livermore, CA*
- **COUNTY OF FRESNO** | *Fresno, CA*
- **CITY OF SANTA BARBARA** | *Santa Barbara, CA*
- **COUNTY OF SANTA CLARA** | *San Jose, CA*
- **COUNTY OF SISKIYOU** | *Yreka, CA*
- **CITY OF RENTON** | *Renton, WA*
- **COUNTY OF ALAMEDA** | *Hayward, CA*
- **REDWOOD CITY** | *Redwood City, CA*
- **DENVER RTD** | *Denver, CO*
- **CITY OF FAIRFIELD** | *Fairfield, CA*
- **LANE TRANSIT** | *Lake County, OR*
- **CITY OF MILPITAS** | *Milpitas, CA*
- **CITY OF TUCSON** |*Tucson, AZ*
- **CITY OF LIVERMORE** |*Livermore, CA*
- **BALTIMORE GAS & ELECTRIC** | *Baltimore, MD*

Education/Certifications

- **BACHELOR OF SCIENCE: FINANCE & ECONOMICS**
  - California State University, 1987

Skills

- **PROJECT MANAGEMENT**
  - Project Tracking & Planning
  - Business Process Analysis & Improvement
  - Workflow Processes
  - Management Review reports
- **ENTERPRISE-WIDE IMPLEMENTATIONS**
- **SOFTWARE**
  - Implementation
  - Regional & Remote Training Sessions
- **DATA**
  - Formatting
  - Migration

SUSIE WADE

Senior Project Manager

Introduction

Susie Wade has been a valued member of the AssetWorks Professional Services team for over 20 years, specializing in project management and implementation of our FleetFocus solution. Her expertise includes project scheduling, resource assignment, budget tracking, and reporting. She also acts as a product consultant, providing training, business process, and documentation services for many of our customers.

Major Projects

CALIFORNIA DEPARTMENT OF TRANSPORTATION | Sacramento, CA

- Successfully implemented AssetWorks FleetFocus, which included over 13,000 vehicles, 12 shops, and more than 400 users
- Implementation included the conversion to Enterprise Purchasing and the web modules

MV TRANSPORTATION | Philadelphia, PA

- Successfully implemented AssetWorks FleetFocus, which included 3500 bus and paratransit vehicles
- Completed system installation and setup; hardware and network configuration; database installation; and data conversion for equipment, parts, and detailed work order historical data

CITY & COUNTY OF SAN FRANCISCO | San Francisco, CA

- Successfully implemented AssetWorks FleetFocus, which included 6000 assets and 100 users
- Implementation included workflow and business process documentation as well as integration points for the Trak Fuel and ERP interfaces

Other Satisfied AssetWorks Clients:

- AREA TRANSPORTATION AUTHORITY (ATA TRANSIT) | Johnsonburg, PA
- U.S. NAVY SPECIAL WARFARE GROUP | Hampton Road, VA
- METROLINK | Los Angeles, CA
- CALGARY POLICE | Calgary, AB, Canada
- 3M | St. Paul, MN
- HONOLULU BOARD OF WATER SUPPLY | Honolulu, HI
- WASHOE COUNTY | Sparks, NV
- SAN DIEGO POLICE DEPARTMENT | San Diego, CA
- STATE OF ILLINOIS: DIVISION OF VEHICLES | Springfield, IL
- COACH USA | Paramus, NJ
- JEFFERSON COUNTY | Birmingham, AL
- HENRICO COUNTY | Glen Allen, VA
- LOUISVILLE GAS AND ELECTRIC/KENTUCKY UTILITIES | Louisville, KY
- STRATHCONA COUNTY | Sherwood Park, AB, Canada
- MEMPHIS AREA TRANSIT AUTHORITY | Memphis, TN
- HERTZ CORPORATION | Oklahoma City, OK
- SUN TRAN | Tuscon, AZ

Education

Master or Science: Computer Science
Washington University in St. Louis | 1986

Bachelor of Science: Computer Science
Transylvania University | 1984

Bachelor of Science: Chemistry
Transylvania University | 1984

Bachelor of Science: Mathematics
Transylvania University | 1984

Skills

- Data Conversion
- Business Process Assessment
- Risk Management
- Software Training
- Parts & Inventory Processes
- Issues Resolution & Management
- Requirements Analysis
- Preventative Maintenance

Prior Experience

SENIOR TECHNICAL CONSULTANT | 1999 - 2002
Peregrine Systems

SOFTWARE DEVELOPER | 1989 - 1999
Computer Ease

EXCEPTIONS:

ASSETWORKS FLEET STANDARD CONTRACTUAL EXCEPTIONS

Term Description	Exception
GENERAL	
Standard Agreements	The AssetWorks Master Agreements is attached to the RFP response, a copy of which can be found at: https://www.assetworks.com/tc-fleet-master/. If AssetWorks is selected for the project, AssetWorks proposes using the Master Agreement as the controlling document. The Master Agreement has been tailored to cover the Services AssetWorks provides and to be fair and mutual. AssetWorks agrees to work with the State of West Virginia ("Customer") to include any terms required under applicable law and to review and negotiate any changes Customer may propose. AssetWorks understands that Customer will require language in the Master Agreement provided in this RFP and will work with Customer to include such language.
Exceptions	This AssetWorks general exception is to any terms within the Request for Proposal that hold AssetWorks to contractual requirements to be included in any resulting agreement between the parties or forming any contractual commitments. AssetWorks will negotiate the agreement in good faith if awarded the business and AssetWorks' bid should not be construed as acceptance of any contractual terms prior to such fully negotiated agreement. The below specific exceptions should not be considered comprehensive.
SPECIFIC	
7	AssetWorks does not believe a performance bond is necessary and reserves the right to negotiate any performance bond.
11	AssetWorks takes exception to the imposition of liquidated damages generally and in these circumstances, in particular. Please remove this requirement/section.
12	See general exceptions above. No signature or submission is to be construed as AssetWorks acceptance of any contractual requirements.
13	Pricing will be attached to the proposal. AssetWorks does not agree to firm pricing in perpetuity.
14	Payments are not all made in arrears. There will be a schedule for payment and implementation. Additionally, maintenance and/or hosting services are prepaid annually.
19	AssetWorks will want the Customer to honor the agreement as we will. Customer commitments are used for planning resources. In the event that this provision is required by Customer, AssetWorks requests that all terms be made mutual and expects at least 90 days' notice of such termination.
20	AssetWorks expects to negotiate a project schedule with Customer and will not agree to a "Time is of the essence" clause.
28	AssetWorks is offering a proprietary solution subject to the following warranty terms: • AssetWorks warrants that our software will conform to the description contained in the documentation provided or published by AssetWorks but makes no other representations, warranty, or guarantees, express or implied, with respect to the accuracy, completeness, or usefulness of the software, INCLUDING EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In the event the software fails to conform to the description contained in the documentation, AssetWorks' sole obligation shall be to correct the errors. This limited warranty is lieu of all liabilities or obligations of AssetWorks

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

	for damages arising out of or in connection with the delivery, use or performance of the software. • The software warranty period shall extend for a period of 90 days from the date of delivery of the software, but in no event later than one year from the date of execution of the Contract. AssetWorks covenants and warrants that it will perform all services with due diligence, in a professional and careful manner, and in compliance with all applicable laws and governmental regulations.
30	AssetWorks requires links to any individual customer policy be provided as an attachment.
36	AssetWorks will agree to indemnify Customer for third party claims to the extent and proportion of the negligence of AssetWorks. AssetWorks does not "hold harmless" in any indemnification clause. Indemnification is subject to our standard limitation of liability as reflected in the limitation of damages clauses in the AssetWorks' contract documents included with this proposal. AssetWorks is not liable for consequential, punitive, exemplary, incidental, indirect or special damages. AssetWorks requires a limitation of liability in all contracts limiting the damages to direct damages only and capping the amount of damages to the amount of fees paid. AssetWorks is not liable for consequential, punitive, exemplary, incidental, indirect or special damages.

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

John Crane
(Name, Title)
John Crane, National Sales Executive
(Printed Name and Title)
998 Old Eagle School Rd #1215, Wayne, PA 19087
(Address)
+1 484-801-0317 x1161/ Fax: 610-971-9447
(Phone Number) / (Fax Number)
john.crane@assetworks.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

AssetWorks LLC
(Company)
Robert Hallett, General Manager
(Authorized Signature) (Representative Name, Title)
Robert Hallett, General Manager
(Printed Name and Title of Authorized Representative)
30 August 2021
(Date)
610-687-9202/ Fax: 610-971-9447
(Phone Number) (Fax Number)

REQUIRED FORMS

Designated Contact Form
Purchasing Affidavit
Disclosure of Interested Parties

© 2021 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core Module(s)	Third Party Solution(s)	Comments/Notes
FLT-001	1	Fleet Management	Acquisition Replacement and Surplus	Allow for identification of replacement criteria by class and type.	Off the Shelf			Capital Planning		
FLT-002	1	Fleet Management	Acquisition Replacement and Surplus	Allow for transfer of fleet/equipment unit into surplus inventory.	Off the Shelf			Asset Management		
FLT-003	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with wvOASIS asset management and purchasing function to support sale of surplus property.	Customization	Medium				
FLT-004	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with BRIM to remove fleet/equipment unit from the State inventory for insurance purposes if sold to an external entity.	Customization	Medium				
FLT-005	1	Fleet Management	Acquisition Replacement and Surplus	Integrate with BRIM to transfer surplus property from one State agency to another State agency if fleet/equipment unit is sold to another State agency.	Customization	Medium				
FLT-006	1	Fleet Management	Acquisition Replacement and Surplus	Provide ability for an authorized user to submit a fleet/equipment vehicle acquisition or replacement request.	Off the Shelf			Asset Management		
FLT-007	1	Fleet Management	Acquisition Replacement and Surplus	When a piece or equipment is in "S" (sale), need prevention of charges against that piece of equipment, unless prompted to correct the status.	Off the Shelf			Asset Management		
FLT-008	2	Fleet Management	Acquisition Replacement and Surplus	Provide the ability to automate equipment replacement scheduling based on time period, mileage and hours utilized and historical repair costs.	Off the Shelf			Capital Planning		
FLT-009	2	Fleet Management	Acquisition Replacement and Surplus	Identify and report on fleet/equipment units meeting replacement criteria.	Off the Shelf			Capital Planning		
FLT-010	2	Fleet Management	Acquisition Replacement and Surplus	Provide the ability to view current depreciated value to determine surplus timing as it relates to life-to-date maintenance expenditures.	Off the Shelf			Available in CAM		Fully supported in CAM module
FLT-011	2	Fleet Management	Acquisition Replacement and Surplus	Support multiple surplus property inventories for fleet/equipment units.	Off the Shelf			Asset Management		
FLT-012	2	Fleet Management	Acquisition Replacement and Surplus	Record sale of surplus property.	Off the Shelf			Asset Management		
FLT-013	2	Fleet Management	Acquisition Replacement and Surplus	Generate a transaction based on completion of sale and integrate with wvOASIS General Ledger to support posting of receipt for user agency share of revenue from surplus property sale.	Customization	Medium				
FLT-014	1	Fleet Management	Acquisition Replacement and Surplus	Provide a workflow process for addition of assets to inventory, transferring of assets from one unit to another, and placement of assets into the field. When assets are relocated, they need to manage and track the organization unit assigned and the new location of the asset.	Off the Shelf			Asset Management		
FLT-015	1	Fleet Management	Acquisition Replacement and Surplus	Provide a workflow process for retirement and disposal of assets.	Off the Shelf			Available in CAM		Fully supported in CAM module
FLT-016	2	Fleet Management	Acquisition Replacement and Surplus	Transfer repair history from one state agency to another if vehicle is transferred/sold to another State agency.	Off the Shelf			Asset Management		
FLT-017	2	Fleet Management	Acquisition Replacement and Surplus	Allow former State agency owner or former State user agency access to history data on a vehicle after vehicle disposal (sell/salvage).	Off the Shelf			Asset Management		
FLT-018	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requestor.	Off the Shelf			Asset Management		
FLT-019	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date requested.	Off the Shelf with Configuration			Asset Management		
FLT-020	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: program area.	Off the Shelf with Configuration			Asset Management		
FLT-021	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: authorized approver.	Off the Shelf			CAM module required		
FLT-022	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date approved.	Off the Shelf			CAM module required		
FLT-023	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requested equipment type.	Off the Shelf			CAM module required		
FLT-024	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: requested manufacturer/make/model (if one) with a justification.	Off the Shelf			CAM module required		
FLT-025	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: location where fleet/equipment unit will be assigned.	Off the Shelf			CAM module required		
FLT-026	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: anticipated cost allocation to active chart of accounts codes, grants or projects.	Off the Shelf			CAM module required		
FLT-027	2	Fleet Management	Acquisition Replacement and Surplus	Capture the following information for an acquisition/replacement request: date fleet/equipment required by.	Off the Shelf			CAM module required		
FLT-028	2	Fleet Management	Acquisition Replacement and Surplus	Calculate estimated replacement cost based on purchase price, estimated salvage value, estimated sale price and depreciation.	Off the Shelf			CAM module required		
FLT-029	2	Fleet Management	Acquisition Replacement and Surplus	Route approval of an acquisition/replacement request based on class, type, unit, estimated cost and other user defined business rules.	Off the Shelf			CAM module required		
FLT-030	2	Fleet Management	Acquisition Replacement and Surplus	Provide approval routing for both internal agency approvals and any required external agency approvals.	Off the Shelf			CAM module required		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-031	2	Fleet Management	Acquisition Replacement and Surplus	Integrate with wvOASIS purchasing function to automatically generate a requisition for an approved fleet/equipment unit pre-populating with available information from the fleet/equipment request form.	Customization	Medium				
FLT-032	1	Fleet Management	Availability Usage and Downtime	Record downtime, showing user defined reason for downtime (down for maintenance, down for parts, absence of a certified operator, etc.).	Off the Shelf			Work Order module		
FLT-033	1	Fleet Management	Availability Usage and Downtime	Provide for tracking of downtime from the time the vehicle is delivered for repair until the time the operator is notified of completion of the repair/maintenance.	Off the Shelf			Work Order module		
FLT-034	1	Fleet Management	Availability Usage and Downtime	Provide means to stop and re-start downtime if a vehicle is worked on, then released, them brought back into the shop and worked on again on the same work order.	Off the Shelf			Work Order module		
FLT-035	1	Fleet Management	Availability Usage and Downtime	Calculate downtime by class, type, manufacturer, make, model and individual fleet/equipment unit based on user- established parameters.	Off the Shelf			Work Order module		
FLT-036	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by class.	Off the Shelf			Work Order module		
FLT-037	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by type.	Off the Shelf			Work Order module		
FLT-038	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by manufacturer.	Off the Shelf			Work Order module		
FLT-039	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by model type.	Off the Shelf			Work Order module		
FLT-040	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by unit.	Off the Shelf			Work Order module		
FLT-041	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by internal or external maintenance.	Off the Shelf			Work Order module		
FLT-042	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user-defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages as well as fleet class, fleet type, manufacturer, model type, business unit, maintenance shop and major components	Off the Shelf			Work Order module		
FLT-043	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by work order type.	Off the Shelf			Work Order module		
FLT-044	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by work order unit.	Off the Shelf			Work Order module		
FLT-045	1	Fleet Management	Availability Usage and Downtime	Provide downtime analysis by user defined downtime reasons, including or excluding non-working hours, weekends, and holidays on work total and averages by major component.	Off the Shelf			Work Order module		
FLT-046	1	Fleet Management	Availability Usage and Downtime	Provide agency specific downtime analysis including total and averages by class, type, agency unit, maintenance shop, manufacturer, make or model using user defined downtime reasons. Downtime may include or exclude non-working hours, weekends, and holidays.	Off the Shelf			Work Order module		
FLT-047	1	Fleet Management	Availability Usage and Downtime	Allow comparison of downtime and availability for different manufacturers, makes and models within a fleet type for life-to-date or another user-defined date ranges.	Off the Shelf			Work Order module		
FLT-048	1	Fleet Management	Availability Usage and Downtime	Notifications and/or flags to alert when a piece of equipment has been in a status for an extended period of time, ie. Idle or Down.	Off the Shelf with Configuration			Notifications module		
FLT-049	1	Fleet Management	Availability Usage and Downtime	When reporting utilization, downtime, etc., need the ability to reverse and correct entries.	Off the Shelf			Work Order module		
FLT-050	2	Fleet Management	Availability Usage and Downtime	Provide an optional downtime calendar to be set up by user-defined parameters for each fleet class, fleet type and/or individual fleet/equipment unit. Downtime parameter codes should include hours of service for day, week, month, weekends, and holidays by fleet/equipment unit.	Off the Shelf			Work Order module		
FLT-051	1	Fleet Management	Cost and Billing	Integrate with wvOASIS cost allocation function to allocate indirect costs associated with fleet management to fleet/equipment units based on various parameters.	Customization	Medium				
FLT-052	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on number of fleet/equipment units in allocation pool.	Off the Shelf			Billing module		
FLT-053	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on total hours fleet/equipment unit is utilized.	Off the Shelf			Billing module		
FLT-054	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on total mileage fleet/equipment units is driven.	Off the Shelf			Billing module		
FLT-055	1	Fleet Management	Cost and Billing	Allocate indirect costs associated with fleet management to fleet/equipment units based on other user defined variables.	Off the Shelf			Billing module		
FLT-056	1	Fleet Management	Cost and Billing	Support allocation of vehicle operating cost to projects, grants and overhead accounts.	Off the Shelf			Billing module		
FLT-057	1	Fleet Management	Cost and Billing	Allow the method of billing to be defined at the individual fleet/equipment unit level.	Off the Shelf			Billing module		
FLT-058	1	Fleet Management	Cost and Billing	Support billing based on a number of parameters including flat rate; usage rate; actual cost of labor, parts, fuel and/or insurance; and any variance of fixed and actual cost.	Off the Shelf			Billing module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-059	1	Fleet Management	Cost and Billing	Support billing for a fixed month ly cost such as equipment replacement cost.	Off the Shelf			Billing module		
FLT-060	2	Fleet Management	Cost and Billing	Assign fleet/equipment units to various cost allocation pools.	Off the Shelf			Billing module		
FLT-061	2	Fleet Management	Cost and Billing	Provide for the billing period to be user definable at the individual fleet/equipment unit level.	Off the Shelf			Billing module		
FLT-062	2	Fleet Management	Cost and Billing	Allow parts to be billed at cost or at an agency specific mark-up percent.	Off the Shelf			Billing module		
FLT-063	2	Fleet Management	Cost and Billing	Allow the method of parts billing to be defined at the individual fleet/equipment unit level.	Off the Shelf			Billing module		
FLT-064	2	Fleet Management	Cost and Billing	Provide ability to generate a detailed statement for each billing period showing the agency or agency unit cost by fleet/equipment unit; report must be able to be requested by various user defined criteria such as agency unit, fleet type, maintenance shop, fleet/equipment unit owner, etc.	Off the Shelf			Billing module		
FLT-065	2	Fleet Management	Cost and Billing	Track and report revenue by unit and maintenance shop.	Off the Shelf			Billing module		
FLT-066	2	Fleet Management	Cost and Billing	Provide a separate statement billing for accident and driver abuse repairs.	Off the Shelf			Work Order module		
FLT-067	2	Fleet Management	Cost and Billing	Integrate with wvOASIS accounts receivable function to support billing for accident/driver abuse repairs.	Customization	Medium				
FLT-068	1	Fleet Management	Equipment Rental Rate	Need to track rental rate for equipment.	Off the Shelf			Billing module		
FLT-069	2	Fleet Management	Equipment Rental Rate	Need to be able to run reports to calculate the equipment rental rates each year or the system needs to able to take the recorded data and automatically calculate the equipment rental rates. The costs that go into calculating the equipment rental rates are the direct charge expense, prorate expenses, direct depreciation (reportable classes), prorate depreciation (non-reportable classes), total hours reported.	Does Not Meet			Billing module		
FLT-070	1	Fleet Management	Fueling	Manage fuel inventory, sale and distribution.	Off the Shelf			Fuel module		
FLT-071	1	Fleet Management	Fueling	Track fueling stations.	Off the Shelf			Fuel module		
FLT-072	1	Fleet Management	Fueling	Track tank inventory.	Off the Shelf			Fuel module		
FLT-073	1	Fleet Management	Fueling	Track pump inventory.	Off the Shelf			Fuel module		
FLT-074	1	Fleet Management	Fueling	Track fuel delivered to or used from a tank.	Off the Shelf			Fuel module		
FLT-075	1	Fleet Management	Fueling	Track fuel delivered to or used from individual pumps.	Off the Shelf			Fuel module		
FLT-076	1	Fleet Management	Fueling	Track in-house, agency and vendor fuel purchases.	Off the Shelf			Fuel module		
FLT-077	1	Fleet Management	Fueling	Track fuel usage by vehicle.	Off the Shelf			Fuel module		
FLT-078	1	Fleet Management	Fueling	Calculate cost of fuel usage for current month, year-to-date, life-to-date and last year, unit, maintenance shop, fleet class, fleet type, manufacturer, model, fleet/equipment unit.	Off the Shelf			Fuel module		
FLT-079	1	Fleet Management	Fueling	Establish and maintain an audit trail for all fuel disbursements and adjustments.	Off the Shelf			Fuel module		
FLT-080	2	Fleet Management	Fueling	Integrate with wvOASIS accounts payable, purchasing and inventory functions to manage internal fuel distribution function.	Customization	Medium				
FLT-081	2	Fleet Management	Fueling	Track fuel used from external purchases.	Off the Shelf			Fuel module		
FLT-082	2	Fleet Management	Fueling	Track location (i.e. vendor, city, address, etc.) where fuel was purchased.	Off the Shelf			Fuel module		
FLT-083	2	Fleet Management	Fueling	Update the odometer reading and date fuel purchased on fleet/equipment master record.	Off the Shelf			Fuel module		
FLT-084	2	Fleet Management	Fueling	Maintain fueling history for each fleet/equipment unit with date, fuel tank and pump (if internal) or external provider and location and fuel usage.	Off the Shelf			Fuel module		
FLT-085	2	Fleet Management	Fueling	Provide capability to integrate with a third party automated fueling system to obtain fuel usage.	Customization	Small				
FLT-086	2	Fleet Management	Fueling	Capture fuel ticket transactions for WVDOT gas pumps not part of an automated fuel management system.	Off the Shelf			Fuel module		
FLT-087	2	Fleet Management	Fueling	Integrate with and upload transactions from a fleet card system.	Customization	Small				
FLT-088	2	Fleet Management	Fueling	Integrate with wvOASIS inventory function and/or third-party fuel management system.	Customization	Small				
FLT-089	2	Fleet Management	Fueling	Provide for multiple agency specific mark-ups on fuel costs by agency subunit, fleet/equipment type, internal or external customer and other parameters.	Off the Shelf			Fuel module		
FLT-090	2	Fleet Management	Fueling	Integrate with wvOASIS accounts receivable and general ledger functions to generate intergovernmental billings for fuel purchases by one state agency from another state agency.	Customization	Medium				
FLT-091	2	Fleet Management	Fueling	Integrate with wvOASIS accounts receivable and billing functions to bill external customers for fuel purchases. External customers include local political subdivisions such as county sheriffs, etc.	Customization	Medium				
FLT-092	2	Fleet Management	Fueling	Alert the fleet/equipment unit operator and fleet class/fleet type owner by email of various transactions outside user-defined ranges (fuel type, fuel mileage, etc.).	Off the Shelf with Configuration			Fuel module		
FLT-093	2	Fleet Management	Fueling	Provide report of fuel usage outside established business rules by fleet/equipment type.	Off the Shelf			Fuel module		
FLT-094	2	Fleet Management	Fueling	Calculate fuel economy (e.g. MPG) for current month, year-to-date, life-to-date and last year by agency, agency unit, maintenance shop, fleet class, fleet type, manufacturer, model and individual fleet/equipment unit.	Off the Shelf			Fuel module		
FLT-095	3	Fleet Management	Fueling	Calculate required state fuel taxes.	Off the Shelf			Fuel module		
FLT-096	3	Fleet Management	Fueling	Calculate federal fuel taxes.	Off the Shelf			Fuel module		
FLT-097	3	Fleet Management	Fueling	Calculate updates to vehicle cost per mile based on fueling entries.	Off the Shelf			Fuel module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-098	3	Fleet Management	Fueling	Provide ability for an authorized user with proper documentation and approvals based on business rules to adjust fuel purchases charged to one fleet unit which was really for other equipment (fuel for a chain saw bought with the fleet card assigned to the employees vehicle, etc.); provide exception report for all adjustments made.	Off the Shelf			Billing module		
FLT-099	1	Fleet Management	General	Integrate with the wvOASIS Financial System to provide information on vehicles, maintenance equipment and other fleet units utilized in performing maintenance work activities.	Customization	Medium				
FLT-100	1	Fleet Management	General	Support vehicle and equipment usage rates.	Off the Shelf			Billing module		
FLT-101	1	Fleet Management	General	Support specific repair codes/activities.	Off the Shelf			Billing module		
FLT-102	1	Fleet Management	General	Support specific labor rates.	Off the Shelf			Billing module		
FLT-103	1	Fleet Management	General	Support preventable maintenance schedules by fleet/equipment type and fleet/equipment unit.	Off the Shelf			Work Order module		
FLT-104	1	Fleet Management	General	Support owners of various types of fleet/equipment units.	Off the Shelf			Work Order module		
FLT-105	1	Fleet Management	General	Support workflows for work order, surplus property and other approvals.	Off the Shelf			Work Order module		
FLT-106	1	Fleet Management	General	Support management of one or multiple vehicle/equipment pools.	Off the Shelf			Work Order module		
FLT-107	1	Fleet Management	General	Integrate fleet and equipment management functions with other relevant wvOASIS functions, including but not limited to asset management, accounts payable, accounts receivable, general ledger, grants, inventory, project accounting, purchasing and time and labor.	Customization	Medium				
FLT-108	1	Fleet Management	General	Interface with wvOASIS cost accounting and allocation, inventory, personnel administration and time and labor to obtain the required actual cost data.	Customization	Medium				
FLT-109	1	Fleet Management	General	Track transfers. The transfers need to be two-way.	Off the Shelf			Asset module		
FLT-110	1	Fleet Management	General	Restrict search capabilities by agency or agency unit based on the user's defined roles/responsibilities.	Off the Shelf			Asset module		
FLT-111	1	Fleet Management	General	Integrate with the wvOASIS time and labor function to capture vehicle usage reported by an employee on their time sheet and update the fleet inventory information with mileage to date as appropriate.	Customization	Medium				
FLT-112	2	Fleet Management	General	Utilize available fleet/equipment information to compare needed versus actual equipment, costing of work orders and daily work accomplishments, and tracking condition and replacement needs.	Off the Shelf			Asset module		
FLT-113	2	Fleet Management	General	Allow an authorized user to reserve equipment which is eligible to be pooled and reflect the reserved equipment in their crew schedules.	Off the Shelf			Asset module		
FLT-114	2	Fleet Management	General	Calculate automatically equipment utilization and non-productive (commitment time) equipment hours by type of equipment, based on data input from crew leader's daily activity reports on equipment usage.	Off the Shelf			Asset module		
FLT-115	2	Fleet Management	General	Allow an authorized user to create minimum usage requirements for specified equipment that will be set as a threshold for comparing planned usage versus actual usage.	Off the Shelf			Asset module		
FLT-116	2	Fleet Management	General	Provide ability to restrict access to view units in fleet inventory by equipment class owner, equipment type owner and organization.	Off the Shelf			Asset module		
FLT-117	2	Fleet Management	General	Provide capability to search the fleet/equipment inventory by multiple parameters including but not limited to VIN or other unique identifier, fleet/equipment type, manufacturer, make, model, miles driven, hours used, etc.	Off the Shelf			Asset module		
FLT-118	2	Fleet Management	General	Restrict only to authorized user's information about fleet/equipment units defined as having special security.	Off the Shelf			Asset module		
FLT-119	2	Fleet Management	General	Allow for re-numbering of fleet/equipment units and retain repair, fuel, accident and preventive maintenance histories.	Off the Shelf			Asset module		
FLT-120	1	Fleet Management	Inventory	Store and track year manufactured.	Off the Shelf			Asset module		
FLT-121	1	Fleet Management	Inventory	Store and track number of doors.	Off the Shelf			Asset module		
FLT-122	1	Fleet Management	Inventory	Store and track optional attachments (minimum of 10).	Off the Shelf			Asset module		
FLT-123	1	Fleet Management	Inventory	Store and track license tag (minimum of 2).	Off the Shelf			Asset module		
FLT-124	1	Fleet Management	Inventory	Store and track fuel type (minimum of 3).	Off the Shelf			Asset module		
FLT-125	1	Fleet Management	Inventory	Store and track fuel capacity.	Off the Shelf			Asset module		
FLT-126	1	Fleet Management	Inventory	Store and track bucket/cubic yards.	Off the Shelf			Asset module		
FLT-127	1	Fleet Management	Inventory	Store and track Gross Vehicle Weight Rating (GVWR).	Off the Shelf			Asset module		
FLT-128	1	Fleet Management	Inventory	Store and track acquisition method (purchase, lease, donation, other).	Off the Shelf			Asset module		
FLT-129	1	Fleet Management	Inventory	Store and track purchase date or lease effective date.	Off the Shelf			Asset module		
FLT-130	1	Fleet Management	Inventory	Store and track unit received date.	Off the Shelf			Asset module		
FLT-131	1	Fleet Management	Inventory	Support entry, tracking, and management of all types of fleet and equipment units in a single enterprise inventory.	Off the Shelf			Asset module		
FLT-132	1	Fleet Management	Inventory	Track passenger vehicles.	Off the Shelf			Asset module		
FLT-133	1	Fleet Management	Inventory	Track light duty trucks.	Off the Shelf			Asset module		
FLT-134	1	Fleet Management	Inventory	Track passenger vans.	Off the Shelf			Asset module		
FLT-135	1	Fleet Management	Inventory	Track construction equipment.	Off the Shelf			Asset module		
FLT-136	1	Fleet Management	Inventory	Track maintenance equipment.	Off the Shelf			Asset module		
FLT-137	1	Fleet Management	Inventory	Track trailers.	Off the Shelf			Asset module		

FLT-138	1	Fleet Management	Inventory	Track agriculture equipment.	Off the Shelf			Asset module			
FLT-139	1	Fleet Management	Inventory	Track other unique equipment classes/types defined by authorized users.	Off the Shelf			Asset module			
FLT-140	1	Fleet Management	Inventory	Allow authorized users to define attributes that must be captured for each equipment class. For each equipment class, this includes required attributes and optional attributes.	Off the Shelf			Asset module			
FLT-141	1	Fleet Management	Inventory	Allow system administrator or other authorized users to designate a equipment class owner.	Off the Shelf			Asset module			
FLT-142	2	Fleet Management	Inventory	Store and track oil capacity.	Off the Shelf			Asset module			
FLT-143	2	Fleet Management	Inventory	Store and track tire size, front.	Off the Shelf			Asset module			
FLT-144	2	Fleet Management	Inventory	Store and track tire size, rear.	Off the Shelf			Asset module			
FLT-145	2	Fleet Management	Inventory	Store and track transmission type.	Off the Shelf			Asset module			
FLT-146	2	Fleet Management	Inventory	Store and track multiple engine types per fleet/equipment unit (gas, hybrid, electric, diesel).	Off the Shelf			Asset module			
FLT-147	2	Fleet Management	Inventory	Store and track engine size.	Off the Shelf			Asset module			
FLT-148	2	Fleet Management	Inventory	Store and track AVL/GIS transponder assigned to unit.	Off the Shelf			Asset module			
FLT-149	2	Fleet Management	Inventory	Store and track toll transponder assigned to unit.	Off the Shelf			Asset module			
FLT-150	2	Fleet Management	Inventory	Store and track optional equipment (multiple fields based on the fleet class and fleet equipment/type).	Off the Shelf			Asset module			
FLT-151	2	Fleet Management	Inventory	Store and track other user defined fields by fleet class and fleet/equipment type (minimum of 20).	Off the Shelf			Asset module			
FLT-152	2	Fleet Management	Inventory	Store and track warranty type by major unit component.	Off the Shelf			Asset module			
FLT-153	2	Fleet Management	Inventory	Store and track warranty expiration date.	Off the Shelf			Asset module			
FLT-154	2	Fleet Management	Inventory	Store and track warranty expiration in mileage.	Off the Shelf			Asset module			
FLT-155	2	Fleet Management	Inventory	Store and track warranty expiration in time.	Off the Shelf			Asset module			
FLT-156	2	Fleet Management	Inventory	Store and track other warranty terms definable by fleet class.	Off the Shelf			Asset module			
FLT-157	2	Fleet Management	Inventory	Store and track annual license/permit renewals for vehicles and other motorized equipment separate from preventive maintenance services including license/permit type, date renewal is required and associated fees.	Off the Shelf			Asset module			
FLT-158	2	Fleet Management	Inventory	Store and track a variety of attributes for each fleet/equipment unit (the specific attribute for each unit will vary by type).	Off the Shelf			Asset module			
FLT-159	2	Fleet Management	Inventory	Store and track purchase order number.	Off the Shelf			Asset module			
FLT-160	2	Fleet Management	Inventory	Store and track lease end date (if leased).	Off the Shelf			Asset module			
FLT-161	2	Fleet Management	Inventory	Store and track location typically responsible for maintaining fleet/equipment unit – this could be a maintenance shop, a designation for external maintenance, etc.	Off the Shelf			Asset module			
FLT-162	2	Fleet Management	Inventory	Store and track employee fleet/equipment unit is assigned to (if assigned to a specific employee).	Off the Shelf			Asset module			
FLT-163	2	Fleet Management	Inventory	Store and track assigned fleet/equipment pool (if not assigned to a specific employee).	Off the Shelf			Asset module			
FLT-164	2	Fleet Management	Inventory	Allow authorized users to add, maintain and delete fleet/equipment classes where a fleet class is a group of related types of fleet and equipment units such as passenger vehicles, light duty trucks, aircraft, rail equipment, construction equipment etc.	Off the Shelf			Asset module			
FLT-165	2	Fleet Management	Inventory	Allow authorized users (Equipment class owners) to add, maintain and delete fleet/equipment types where a fleet/equipment type is a subcategory of related units within a class (for example four door passenger vehicles within the passenger vehicle class, etc.).	Off the Shelf			Asset module			
FLT-166	2	Fleet Management	Inventory	Provide the ability for an authorized user to create templates for each specific fleet/equipment type to facilitate entry and maintenance of equipment units into the system.	Off the Shelf			Asset module			
FLT-167	2	Fleet Management	Inventory	Allow system administrator or other authorized users to define user roles and responsibilities for each equipment type (add, maintain, delete units from inventory, transfer, perform/record maintenance, etc.).	Off the Shelf			Asset module			
FLT-168	2	Fleet Management	Inventory	Integrate automatically with the West Virginia Board of Risk and Insurance Management (BRIM) to add new fleet/equipment record to BRIM SQL Server database or to update the BRIM database with changes recorded in wvOASIS.	Customization	Medium					
FLT-169	2	Fleet Management	Inventory	Provide the ability to assign add on components to a fleet/equipment unit.	Off the Shelf			Asset module			
FLT-170	2	Fleet Management	Inventory	Integrate with wvOASIS purchasing function to automatically create initial fleet/equipment unit record upon receipt of vehicle populating initially with appropriate information available within wvOASIS purchasing function; authorized user must be able to then add additional information within the fleet/equipment unit record.	Customization	Medium					
FLT-171	2	Fleet Management	Inventory	Provide a minimum five (5) group assignments per fleet/equipment unit (e.g., agency, unit, location, etc.).	Off the Shelf			Asset module			
FLT-172	2	Fleet Management	Inventory	Provide a minimum of three (3) user-defined meters per fleet or equipment unit.	Off the Shelf			Asset module			
FLT-173	2	Fleet Management	Inventory	Provide a minimum of 12 add-fluid types per fleet/equipment unit.	Off the Shelf			Asset module			
FLT-174	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for monthly or other recurring payments for leased vehicles; this could be a payment to an external entity or an intergovernmental transfer to another State agency.	Customization	Medium					

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-175	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for monthly or other recurring payments for financed vehicles.	Customization	Medium				
FLT-176	2	Fleet Management	Inventory	Integrate with Accounts Payable function to automatically generate payment request for renewal of required licenses and permits.	Customization	Medium				
FLT-177	2	Fleet Management	Inventory	Maintain a history of any accidents associated with a fleet/equipment unit.	Off the Shelf			Asset module		
FLT-178	2	Fleet Management	Inventory	Allow a fleet class owner for an agency to create a template for entering accidents for a specific fleet class and/or fleet/equipment type.	Off the Shelf			Asset module		
FLT-179	2	Fleet Management	Inventory	Integrate with BRIM to automatically provide notification of accident and available information on the accident including attachment and transfer to BRIM of electronic files (pictures, police reports, estimates, etc.).	Customization	Medium				
FLT-180	2	Fleet Management	Inventory	Need ability to receive in rebuilt engines into inventory and have ability to credit a "misc" equipment identification number (EDP#). Engine rebuilds have their own work orders and charges to those usually go to a "dummy" EDP.	Off the Shelf			Asset module		
FLT-181	3	Fleet Management	Inventory	Store and track seating.	Off the Shelf			Asset module		
FLT-182	3	Fleet Management	Inventory	Store and track color 1.	Off the Shelf			Asset module		
FLT-183	3	Fleet Management	Inventory	Store and track color 2.	Off the Shelf			Asset module		
FLT-184	3	Fleet Management	Inventory	Store and track width.	Off the Shelf			Asset module		
FLT-185	3	Fleet Management	Inventory	Store and track height.	Off the Shelf			Asset module		
FLT-186	3	Fleet Management	Inventory	Store and track length.	Off the Shelf			Asset module		
FLT-187	3	Fleet Management	Inventory	Store and track wheelbase.	Off the Shelf			Asset module		
FLT-188	3	Fleet Management	Inventory	Store and track number of axles.	Off the Shelf			Asset module		
FLT-189	3	Fleet Management	Inventory	Store and track front or rear wheel drive axles.	Off the Shelf			Asset module		
FLT-190	3	Fleet Management	Inventory	Store and track number of tires, front.	Off the Shelf			Asset module		
FLT-191	3	Fleet Management	Inventory	Store and track number of tires, rear.	Off the Shelf			Asset module		
FLT-192	3	Fleet Management	Inventory	Store and track engine cylinders.	Off the Shelf			Asset module		
FLT-193	3	Fleet Management	Inventory	Store and track color 3.	Off the Shelf			Asset module		
FLT-194	3	Fleet Management	Inventory	Integrate with the R.L. Polk and Company Vehicle Identification Number Analysis software to populate the fleet unit attributes to the extent possible.	Customization	Medium				
FLT-195	1	Fleet Management	Labor	Track both direct and indirect labor for each fleet/equipment unit.	Off the Shelf			Asset module		
FLT-196	1	Fleet Management	Labor	Capture all labor transactions real-time as the mechanic logs on and off repairs.	Off the Shelf			Asset module		
FLT-197	2	Fleet Management	Labor	Prepare efficiency reports which measure how a mechanic's performance compares with one or more user-defined standards. Reports must be able to be generated for the entire agency, a set of maintenance shops, a maintenance shop or for one or more mechanics for a user defined set of repair types and date range.	Off the Shelf			Asset module		
FLT-198	3	Fleet Management	Labor	Provide the capability to view on-line work in progress, as well as all work completed that day by mechanic and location.	Off the Shelf			Asset module		
FLT-199	3	Fleet Management	Labor	Produce labor averages by repair type and individual mechanic for a maintenance shop, set of maintenance shops.	Off the Shelf			Asset module		
FLT-200	1	Fleet Management	Motorpool	Allow fleet units/equipment to be defined as a pool vehicle which can be reserved for use.	Off the Shelf			Motor Pool module		
FLT-201	1	Fleet Management	Motorpool	Capture and track all costs associated with each rental.	Off the Shelf			Motor Pool module		
FLT-202	1	Fleet Management	Motorpool	Allow additional costs to be added to each rental.	Off the Shelf			Motor Pool module		
FLT-203	1	Fleet Management	Motorpool	Provide the ability to define how the rental costs will be calculated to meet individual agency or motor pool specific needs, i.e., rental rate and CPM for excessive miles or rental rate of CPM for total miles, whichever is greater.	Off the Shelf			Motor Pool module		
FLT-204	2	Fleet Management	Motorpool	Provide capability to manage WVDOT motor pools.	Off the Shelf			Motor Pool module		
FLT-205	2	Fleet Management	Motorpool	Allow definition and set-up of an unlimited number of motor pools.	Off the Shelf			Motor Pool module		
FLT-206	2	Fleet Management	Motorpool	Define for each motor pool the employee units or groups of employee units which are eligible to reserve the fleet/equipment units in each motor pool.	Off the Shelf			Motor Pool module		
FLT-207	2	Fleet Management	Motorpool	Assign each pooled fleet /equipment unit to a specific motor pool.	Off the Shelf			Motor Pool module		
FLT-208	2	Fleet Management	Motorpool	Allow authorized users to view equipment availability by class, type, time in and time out and by rental location.	Off the Shelf			Motor Pool module		
FLT-209	2	Fleet Management	Motorpool	Allow vehicles to be reserved for future periods based on user defined rules with proper security authorization.	Off the Shelf			Motor Pool module		
FLT-210	2	Fleet Management	Motorpool	Capture reservation information including unit; an active/valid chart of account codes, grant or project to charge rental to; person requesting reservation; destination; employee operator name and driver license number; dispatched information; fleet unit number; rental charges; and pick-up site location.	Off the Shelf			Motor Pool module		
FLT-211	2	Fleet Management	Motorpool	Allow override of vehicle reservations with proper security authorization.	Off the Shelf with Configuration			Motor Pool module		
FLT-212	2	Fleet Management	Motorpool	Generate reservation with a PIN# for key control purposes.	Off the Shelf			Motor Pool module		
FLT-213	2	Fleet Management	Motorpool	Support scheduling of an assigned pool vehicle/equipment unit for preventive maintenance.	Off the Shelf			Motor Pool module		
FLT-214	2	Fleet Management	Motorpool	Support billing for all rental charges, maintenance and operations costs on a single invoice.	Off the Shelf			Motor Pool module		
FLT-215	3	Fleet Management	Motorpool	Support user defined rental rate structure by fleet class and fleet type for hourly, daily, weekly, monthly and annual rentals.	Off the Shelf			Motor Pool module		

FLT-216	3	Fleet Management	Motorpool	Provide a rental rate structure which allows free miles or unlimited miles for each type of rental.	Off the Shelf			Motor Pool module		
FLT-217	1	Fleet Management	Parts Inventory	Maintain year to date and life to date history.	Off the Shelf			Asset module		
FLT-218	1	Fleet Management	Parts Inventory	Provide on-line search capabilities of all parts by part type, agency part number, manufacturer's part number, alternate part number, and a user-defined alpha/numeric reference field. The search screen must also display minimum and maximum stocking levels and quantity on hand.	Off the Shelf			Asset module		
FLT-219	2	Fleet Management	Parts Inventory	Integrate with the wvOASIS inventory function to maintain an inventory of an unlimited number of consumable inventory (parts, materials, other inventory).	Customization	Medium				
FLT-220	2	Fleet Management	Parts Inventory	Support set-up of multiple stock rooms or warehouse locations.	Off the Shelf			Inventory module		
FLT-221	2	Fleet Management	Parts Inventory	Provide the capability to integrate with bar code scanners to receive, transfer, adjust and charge out parts inventory.	Off the Shelf			Inventory module		
FLT-222	2	Fleet Management	Parts Inventory	Track information on the annual part usage, the type of usage, and the piece of equipment that the part is normally issued to.	Off the Shelf			Inventory module		
FLT-223	2	Fleet Management	Parts Inventory	Track the issuance of all stocked and non-stocked parts to a specific fleet unit or piece of equipment.	Off the Shelf			Inventory module		
FLT-224	2	Fleet Management	Parts Inventory	Allow for issuance of parts without having to charge it to a work order; instead parts must be charged to an active chart of account code, grant or project. Provide an audit trail and exception report of these situations.	Off the Shelf			Inventory module		
FLT-225	2	Fleet Management	Parts Inventory	Maintain inventory history including transfers and adjustments.	Off the Shelf			Inventory module		
FLT-226	2	Fleet Management	Parts Inventory	Track and record part transfers between shops or locations. Implement appropriate controls to ensure that transfers of parts are acknowledged by the sender and receiver and an exception report is provided for transfers not acknowledged and for any variance in quantities.	Off the Shelf			Inventory module		
FLT-227	2	Fleet Management	Parts Inventory	Provide a full range of audit tracking capabilities including any adjustment to unit cost, count, return to inventory, return to vendor, transfers, from one storeroom to another, by operator, and date/time.	Off the Shelf			Inventory module		
FLT-228	2	Fleet Management	Parts Inventory	Provide for an agency specific mark-up percent by part type and/or part number.	Off the Shelf			Inventory module		
FLT-229	1	Fleet Management	Parts Inventory	Integrate with wvOASIS to support frequent updates for quantity (On-hand, on-order, etc.), cost, location (warehouse/bin/stockpile) and related information to support the Fleet system having current updated inventory information in near real-time.	Customization	Medium				
FLT-230	1	Fleet Management	Parts Inventory	Integrate with wvOASIS to update consumable inventory (parts, materials and other inventory) consumed on work orders/repair orders.	Customization	Medium				
FLT-231	1	Fleet Management	Parts Inventory	Utilize inventory information to compare materials needed for scheduling materials on-hand, cost work orders and daily work accomplishments, and reorder materials when stock levels reach reorder points.	Off the Shelf			Inventory module		
FLT-232	1	Fleet Management	Parts Inventory	Track information on annual inventory usage, the type of usage, and the work activities the material or other item is normally issued for.	Off the Shelf			Inventory module		
FLT-233	1	Fleet Management	Parts Inventory	Track the issuance of all stocked and non-stocked inventory items to a specific asset or set of assets.	Off the Shelf			Inventory module		
FLT-234	1	Fleet Management	Parts Inventory	Store and display manufacturer part, material or item number.	Off the Shelf			Inventory module		
FLT-235	1	Fleet Management	Parts Inventory	Store and display item description.	Off the Shelf			Inventory module		
FLT-236	1	Fleet Management	Parts Inventory	Store locations and volumes of inventory items.	Off the Shelf			Inventory module		
FLT-237	2	Fleet Management	Parts Inventory	Display/report purchases and receipts by vendor for all parts, one or more types of parts or a specific part for the fiscal year or other user-defined time period.	Off the Shelf			Inventory module		
FLT-238	2	Fleet Management	Parts Inventory	Provide ability to change a part number and have that change be reflected for all historical data.	Off the Shelf			Inventory module		
FLT-239	2	Fleet Management	Parts Inventory	Allow merging of up to 20-part numbers into one-part number while retaining historical data.	Off the Shelf			Inventory module		
FLT-240	2	Fleet Management	Parts Inventory	Track activity on non-stocked parts to include frequency of issue and fiscal year-to-date information.	Off the Shelf			Inventory module		
FLT-241	2	Fleet Management	Parts Inventory	Price parts issued to work orders at a moving average.	Off the Shelf			Inventory module		
FLT-242	2	Fleet Management	Parts Inventory	Generate a surplus parts reports which can track lack of activity for user-defined periods of time.	Off the Shelf			Inventory module		
FLT-243	2	Fleet Management	Parts Inventory	Provide support for ABC classification of parts.	Off the Shelf			Inventory module		
FLT-244	2	Fleet Management	Parts Inventory	Support capability to track performance on a parts contract (actual cost per part vs. the contracted cost per part).	Off the Shelf			Inventory module		
FLT-245	1	Fleet Management	Preventative Maintenance	Track and identify fleet/equipment units and major components due for preventative maintenance (PM).	Off the Shelf			Work Order module		
FLT-246	1	Fleet Management	Preventative Maintenance	Generate a listing of fleet and equipment units and components that are due for maintenance based on user defined parameters.	Off the Shelf			Work Order module		
FLT-247	1	Fleet Management	Preventative Maintenance	Need forms and a weekly report for these.	Off the Shelf			Work Order module		
FLT-248	1	Fleet Management	Preventative Maintenance	Enter the labor/mechanic hours used to perform PM activities.	Off the Shelf			Work Order module		
FLT-249	2	Fleet Management	Preventative Maintenance	Notify electronically designated organization contacts, including the fleet/equipment unit operator and operator's supervisor, when the fleet unit or major components is under a factory recall.	Off the Shelf with Configuration			Work Order module		

FLT-250	2	Fleet Management	Preventative Maintenance	Display trend analysis (agency, employee, fleet/equipment type) in regard to timeliness in response to scheduled PM's.	Off the Shelf			Work Order module		
FLT-251	2	Fleet Management	Preventative Maintenance	Schedule automatically preventative maintenance procedures for fleet and equipment units and components.	Off the Shelf			Work Order module		
FLT-252	2	Fleet Management	Preventative Maintenance	Need process for PM setups by Class and inventory, and notifications for them. Notifications include when the PM is due and when it is complete.	Off the Shelf			Work Order module		
FLT-253	2	Fleet Management	Preventative Maintenance	Need process for in-house PM accomplishment.	Off the Shelf			Work Order module		
FLT-254	2	Fleet Management	Preventative Maintenance	Need tracking process for Commercial PM accomplishments using third-party vendor or P-Card.	Off the Shelf			Work Order module		
FLT-255	2	Fleet Management	Preventative Maintenance	Need hierarchical scheduling of preventive maintenance activities.	Off the Shelf			Work Order module		
FLT-256	2	Fleet Management	Preventative Maintenance	Create a PM repair order from a PM-due record.	Off the Shelf			Work Order module		
FLT-257	2	Fleet Management	Preventative Maintenance	Track inspections and emissions testing that is due and generate a report of test due within a user defined period of time.	Off the Shelf			Work Order module		
FLT-258	2	Fleet Management	Preventative Maintenance	Update automatically the next maintenance due date without any manual intervention based upon user-specified maintenance frequency.	Off the Shelf			Work Order module		
FLT-259	2	Fleet Management	Preventative Maintenance	Schedule and track maintenance on multiple vehicle components.	Off the Shelf			Work Order module		
FLT-260	2	Fleet Management	Preventative Maintenance	Enter the parts taken from in-house stock inventory.	Off the Shelf			Inventory module		
FLT-261	2	Fleet Management	Preventative Maintenance	Enter warranty information as needed.	Off the Shelf			Work Order module		
FLT-262	2	Fleet Management	Preventative Maintenance	Provide individual maintenance scheduling for each equipment component so that differences due to age, usage and manufacturer are accounted for.	Off the Shelf			Work Order module		
FLT-263	2	Fleet Management	Preventative Maintenance	Provide the capability to schedule unlimited maintenance activities per fleet or equipment unit.	Off the Shelf			Work Order module		
FLT-264	2	Fleet Management	Repairs	Maintain repair histories for both WVDOT and vendor repairs.	Off the Shelf			Work Order module		
FLT-265	2	Fleet Management	Repairs	Track and report costs (work and parts) for scheduled, unscheduled, road calls and accident maintenance.	Off the Shelf			Work Order module		
FLT-266	2	Fleet Management	Repairs	Provide ability to quickly reference complete equipment repair history without generating a report.	Off the Shelf			Work Order module		
FLT-267	2	Fleet Management	Repairs	Provide ability to search and query repair history by a number of user-defined parameters including fleet class, fleet type, manufacturer, fleet unit number, maintenance shop, repair date range, etc.	Off the Shelf			Work Order module		
FLT-268	2	Fleet Management	Repairs	Allow for transfer of fleet/equipment unit between organizations, while retaining repair, fuel and preventive maintenance histories for a user definable time period.	Off the Shelf			Work Order module		
FLT-269	1	Fleet Management	Reporting	Provide extensive standard management reports covering classes, types, fleet/equipment units, work orders, parts, operations cost, exception reports (utilization and CPA), and fleet/equipment replacement. These reports must be available with user defined options that will allow them to be v	Off the Shelf			Reporting module		
FLT-270	1	Fleet Management	Reporting	Provide a user-friendly ad-hoc reporting capability allowing for access to fleet/equipment unit inventory, work orders, preventive maintenance, repair history, fuel and other information within the wvOASIS fleet function.	Off the Shelf			Reporting module		
FLT-271	1	Fleet Management	Reporting	Provide ability for authorized users to execute pre-defined reports at the enterprise level, agency, units within agency and other user defined criteria.	Off the Shelf			Reporting module		
FLT-272	1	Fleet Management	Reporting	Provide optional report selection criteria to restrict the data by agency, class, type, whether equipment unit is active or has been transferred/retired/sent to surplus, shop/location, repair code (or any combination of these factors).	Off the Shelf			Reporting module		
FLT-273	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by agency or unit or program area.	Off the Shelf			Reporting module		
FLT-274	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by fleet/equipment unit location by multiple agency specific organizational parameters (for example regions, districts, counties, maintenance shop, parks, forests, etc.).	Off the Shelf			Reporting module		
FLT-275	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by fleet/equipment owner (individual or business unit for a pooled fleet/equipment unit).	Off the Shelf			Reporting module		
FLT-276	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments for fleet/equipment units which are on temporary loan including the owner of the fleet/equipment unit and the individual or business unit to whom the equipment is on loan to.	Off the Shelf			Reporting module		
FLT-277	1	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments by assigned maintenance facilities.	Off the Shelf			Reporting module		
FLT-278	1	Fleet Management	Reporting	Prepare fleet/equipment unit report by various user defined parameters including- by class, by department, broken out by make, model, year, fuel type, GVW, engine type/size, transmission type, radio type or any other attribute of vehicle.	Off the Shelf			Reporting module		
FLT-279	1	Fleet Management	Reporting	Report on fleet/equipment unit status by active, salvaged, retained, reserved, etc.	Off the Shelf			Reporting module		
FLT-280	1	Fleet Management	Reporting	Provide a list of fleet/equipment units by location where assigned or loaned.	Off the Shelf			Reporting module		
FLT-281	1	Fleet Management	Reporting	Provide a fleet/equipment usage report showing vehicles driven a certain number of miles as defined by the user with no preventive maintenance.	Off the Shelf			Reporting module		
FLT-282	1	Fleet Management	Reporting	Provide a fleet/equipment usage report showing equipment utilized more than a certain number of hours as defined by the user with no preventive maintenance.	Off the Shelf			Reporting module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-283	1	Fleet Management	Reporting	Provide a report of fleet/equipment units with no activity/usage within a given time period.	Off the Shelf			Reporting module		
FLT-284	1	Fleet Management	Reporting	Prepare preventive maintenance reports for any combination of type and interval (monthly, quarterly, etc.).	Off the Shelf			Reporting module		
FLT-285	1	Fleet Management	Reporting	Report number of preventive maintenance operations performed in a given time period by fleet or equipment type.	Off the Shelf			Reporting module		
FLT-286	1	Fleet Management	Reporting	Provide life-to-date operational cost report per vehicle including by category including repair cost, operational cost, fuel cost, maintenance cost (labor and parts) and administrative cost.	Off the Shelf			Reporting module		
FLT-287	1	Fleet Management	Reporting	Provide cumulative fleet/equipment costs (current, year-to-date, life-to-date, last year cost figures).	Off the Shelf			Reporting module		
FLT-288	2	Fleet Management	Reporting	Produce a listing/inventory of fleet/equipment unit assignments which are externally maintained.	Off the Shelf			Reporting module		
FLT-289	2	Fleet Management	Reporting	Provide for a replacement unit report including fleet and equipment units by type over certain time (hours) and/or mileage limits, used for budget forecasting.	Off the Shelf			Reporting module		
FLT-290	2	Fleet Management	Reporting	Provide an automated fueling system report, showing equipment information, refueling setting, fuel type, other cost and mileage.	Off the Shelf			Reporting module		
FLT-291	2	Fleet Management	Reporting	Provide a fuel card report, matching card and assigned vehicle.	Off the Shelf			Reporting module		
FLT-292	2	Fleet Management	Reporting	Prepare a component usage report showing components operated over a certain number of hours as defined by the user with no preventive maintenance.	Off the Shelf			Reporting module		
FLT-293	2	Fleet Management	Reporting	Prepare labor reports for any combination of the following: employee or work units for any given time period; repair/activity reason such as preventive maintenance, road call, breakdown, etc.; subassembly such as brakes, transmission, cooling system, etc; and repair type.	Off the Shelf			Reporting module		
FLT-294	2	Fleet Management	Reporting	Prepare a repair history report by component and by vendor supplying component.	Off the Shelf			Reporting module		
FLT-295	2	Fleet Management	Reporting	Prepare a report showing the number of scheduled and unscheduled work orders for a user defined time period.	Off the Shelf			Reporting module		
FLT-296	2	Fleet Management	Reporting	Prepare a report showing the number of work orders by reason, subassembly and/or repair type for a user defined time period.	Off the Shelf			Reporting module		
FLT-297	2	Fleet Management	Reporting	Prepare a report of open work orders by status, type and/or shop (pending, waiting parts, etc.).	Off the Shelf			Reporting module		
FLT-298	2	Fleet Management	Reporting	Prepare a report showing repeat work orders on the same unit for the last 30, 60 or 90 days.	Off the Shelf			Reporting module		
FLT-299	2	Fleet Management	Reporting	Provide equipment down type report by summary or detail for user defined time periods for location; class; type; preventive maintenance code; and down time reason.	Off the Shelf			Reporting module		
FLT-300	2	Fleet Management	Reporting	Provide a report of tire repair activity.	Off the Shelf			Reporting module		
FLT-301	2	Fleet Management	Reporting	Prepare oil and fluid report by summary or detail for user defined time periods by location; assigned maintenance facilities; fleet class/type; manufacturer, model and make; and preventative maintenance code.	Off the Shelf			Reporting module		
FLT-302	2	Fleet Management	Reporting	Generate warranty usage report including savings associated with warranty work.	Off the Shelf			Reporting module		
FLT-303	2	Fleet Management	Reporting	Prepare an accountability report that details all direct and indirect work by a mechanic and location for any user defined period.	Off the Shelf			Reporting module		
FLT-304	1	Fleet Management	Tires	Allow classification of tires by type (i.e., recap, airless, solid, etc.).	Off the Shelf with Configuration			Tire module		
FLT-305	1	Fleet Management	Tires	Track tire costs by type.	Off the Shelf with Configuration			Tire module		
FLT-306	1	Fleet Management	Tires	Track tire location by type including unit, position, scrap and staging.	Off the Shelf with Configuration			Tire module		
FLT-307	2	Fleet Management	Tires	Support comparison of tire makes and models.	Off the Shelf with Configuration			Tire module		
FLT-308	3	Fleet Management	Tires	Track tread wear by type.	Off the Shelf with Configuration			Tire module		
FLT-309	3	Fleet Management	Tires	Track tire performance by type.	Off the Shelf with Configuration			Tire module		
FLT-310	2	Fleet Management	Warranty Management	Support warranty tracking including warranty types, cycle (hours, days, years, miles) and length of cycle in time and/or miles.	Off the Shelf			Work Order module		
FLT-311	1	Fleet Management	Work Orders	Track equipment status changes (X,S,A,R,W,P). X=Down, S=Sale, A=Active, R=Repair, W=Warranty, and P=Pool.	Off the Shelf with Configuration			Work Order module		
FLT-312	1	Fleet Management	Work Orders	Need to be printable/reportable.	Off the Shelf			Work Order module		
FLT-313	1	Fleet Management	Work Orders	Need to have closure process	Off the Shelf			Work Order module		
FLT-314	1	Fleet Management	Work Orders	Track regular and overtime labor.	Off the Shelf			Work Order module		
FLT-315	2	Fleet Management	Work Orders	Need non-formatted fields for additional notes.	Off the Shelf			Work Order module		
FLT-316	2	Fleet Management	Work Orders	Need drop down options	Off the Shelf			Work Order module		
FLT-317	2	Fleet Management	Work Orders	Mechanics need to be listed for assignment.	Off the Shelf			Work Order module		
FLT-318	2	Fleet Management	Work Orders	Allow Equipment Division to define, maintain and view repair codes including the repair code and a work description.	Off the Shelf			Work Order module		
FLT-319	2	Fleet Management	Work Orders	Allow Equipment Division or other authorized users to define rates for repair services by organization, employee, maintenance shop or skill within a maintenance shop.	Off the Shelf			Work Order module		
FLT-320	2	Fleet Management	Work Orders	Track general shop as well as individual mechanic labor rates.	Off the Shelf			Work Order module		
FLT-321	2	Fleet Management	Work Orders	Allow for assignment of individual overtime rates to each mechanic.	Off the Shelf			Work Order module		
FLT-322	2	Fleet Management	Work Orders	Provide capability to establish workflows for work request and job estimate review and approval based on user defined business rules and threshold levels.	Off the Shelf			Work Order module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-323	2	Fleet Management	Work Orders	Allow an operator of a fleet/equipment unit or authorized user to generate a work request for a required repair or service to a fleet/equipment unit.	Off the Shelf			Work Order module		
FLT-324	2	Fleet Management	Work Orders	Capture on work request the nature of the problem/service/repair and the criticality.	Off the Shelf			Work Order module		
FLT-325	2	Fleet Management	Work Orders	Allow work orders to be charged to an active grant, project or combination of chart of accounts codes.	Off the Shelf with Configuration			Work Order module		
FLT-326	2	Fleet Management	Work Orders	Provide for a repairs-to-do lookup feature from repair order entry enabling user to add repair-to-do to existing repair order.	Off the Shelf with Configuration			Work Order module		
FLT-327	2	Fleet Management	Work Orders	Support driver notes to the mechanic of a minimum of 240 characters per work request.	Off the Shelf			Work Order module		
FLT-328	2	Fleet Management	Work Orders	Provide the ability to attach various file types to the work request/work order.	Off the Shelf			Work Order module		
FLT-329	2	Fleet Management	Work Orders	Route work order request for a service or repair to the operator's supervisor or other authorized user for approval based on business rules.	Off the Shelf			Work Order module		
FLT-330	2	Fleet Management	Work Orders	Route work order automatically to the appropriate maintenance shop for review, estimating and assignment based on maintenance shop designated in the fleet inventory or other user defined business rules.	Off the Shelf with Configuration			Work Order module		
FLT-331	2	Fleet Management	Work Orders	Allow for re-assignment of work order between maintenance shops or to an external repair vendor.	Off the Shelf			Work Order module		
FLT-332	2	Fleet Management	Work Orders	Capture estimated cost (labor, parts, other costs) for a work order.	Off the Shelf			Work Order module		
FLT-333	2	Fleet Management	Work Orders	Support multiple repair types on a work order (such as the inclusion of a warranty repair on a PM work order), while still allowing detailed analysis by repair type.	Off the Shelf			Work Order module		
FLT-334	2	Fleet Management	Work Orders	Provide a mechanism to red flag repairs caused by the negligence of others (i.e. traffic accidents, vandalism, etc.) The party determined at fault must be able to then be billed for these repairs.	Off the Shelf			Work Order module		
FLT-335	2	Fleet Management	Work Orders	Integrate with BRIM to automatically report the estimated repair costs associated with accidents.	Customization	Medium				
FLT-336	2	Fleet Management	Work Orders	Allow for automated routing of work order back to operator (requestor) and/or operator's supervisor for approval of the estimate and generation of the work order.	Off the Shelf with Configuration			Work Order module		
FLT-337	2	Fleet Management	Work Orders	Allow the maintenance shop supervisor to view each mechanic's current work queue in a maintenance shop including assigned jobs, estimated completion times for each job and estimated availability time.	Off the Shelf with Configuration			Work Order module		
FLT-338	2	Fleet Management	Work Orders	Allow a maintenance shop supervisor to identify options for assignment of a work order based on skill set and level of mechanic.	Off the Shelf with Configuration			Work Order module		
FLT-339	2	Fleet Management	Work Orders	Allow a maintenance shop supervisor to assign and automatically route via a work flow a work order to a mechanic within the maintenance shop.	Off the Shelf with Configuration			Work Order module		
FLT-340	2	Fleet Management	Work Orders	Allow the maintenance shop supervisor to adjust the priority of a work order moving a work order up in the mechanics work queue.	Off the Shelf with Configuration			Work Order module		
FLT-341	2	Fleet Management	Work Orders	Support multiple mechanics on a single repair order.	Off the Shelf			Work Order module		
FLT-342	2	Fleet Management	Work Orders	Create or automatically generate work orders based on user defined business rules (preventive maintenance schedules, warranty check, inspections, etc.).	Off the Shelf with Configuration			Work Order module		
FLT-343	2	Fleet Management	Work Orders	Notify via email the assigned operator or designated owner of the fleet/equipment unit of automatically generated work orders.	Off the Shelf with Configuration			Notifications module		
FLT-344	2	Fleet Management	Work Orders	Generate work orders for external repairs.	Customization	Medium				
FLT-345	2	Fleet Management	Work Orders	Allow for e-mail or fax of repair tickets directly to vendors.	Customization	Medium				
FLT-346	2	Fleet Management	Work Orders	Provide the capability to integrate with management systems of multiple outsourced maintenance providers to electronically transfer work order information.	Customization	Medium				
FLT-347	2	Fleet Management	Work Orders	Route assigned work orders automatically via workflow to the mechanics work queue.	Off the Shelf with Configuration			Work Order module		
FLT-348	2	Fleet Management	Work Orders	Allow mechanic to log start time on a job by selecting it from their work queue through online entry or scanning a printed bar code on a printed work order form.	Off the Shelf			Work Order module		
FLT-349	2	Fleet Management	Work Orders	Identify and display all warranties and preventive maintenance as part of a work order.	Off the Shelf			Work Order module		
FLT-350	2	Fleet Management	Work Orders	Generate part list and maintenance procedures with the work orders.	Off the Shelf with Configuration			Work Order module		
FLT-351	2	Fleet Management	Work Orders	Auto create the parts requisition with the work order.	Off the Shelf			Work Order module		
FLT-352	2	Fleet Management	Work Orders	Allow a mechanic to perform data entry of parts utilized, parts returned to inventory and other information through scanning of bar codes on the parts, etc.	Off the Shelf			Work Order module		
FLT-353	2	Fleet Management	Work Orders	Allow mechanic to indicate work order completion.	Off the Shelf			Work Order module		
FLT-354	2	Fleet Management	Work Orders	Allow authorized user to review and approve work order as completed.	Off the Shelf with Configuration			Work Order module		
FLT-355	2	Fleet Management	Work Orders	Prevent further changes to a work order after approval. Further changes will require an additional transaction against the work order so that the audit trail of changes is maintained.	Off the Shelf with Configuration			Work Order module		
FLT-356	2	Fleet Management	Work Orders	Allow a work order to be credited to allow for both current and past errors.	Off the Shelf with Configuration			Work Order module		
FLT-357	2	Fleet Management	Work Orders	Provide work order search capability by a number of parameters including equipment identification number (EIN), maintenance shop, status (open, closed, cancelled), date range, work order type, fleet/equipment type, make, model, etc.	Off the Shelf			Work Order module		
FLT-358	2	Fleet Management	Work Orders	Restrict work order search capability and access to work orders by a user's roles/responsibilities.	Off the Shelf with Configuration			Work Order module		
FLT-359	2	Fleet Management	Work Orders	Allow for partially complete repair orders that remain open through month and year end without starting new repair order.	Off the Shelf			Work Order module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Requirements

FLT-360	2	Fleet Management	Work Orders	Allow authorized users to credit repairs on an existing repair order without deleting when data entry mistakes are made.	Off the Shelf			Work Order module		
FLT-361	2	Fleet Management	Work Orders	Update employee time information in the wvOASIS time and labor function based on the actual time reported by the employee on the work order. Total time for an employee for each day should be pre-populated on the time sheet based on the total time charged to work orders that day.	Customization	Medium				
FLT-362	2	Fleet Management	Work Orders	Update parts inventory in wvOASIS inventory function based on parts used on a work order.	Customization	Medium				
FLT-363	2	Fleet Management	Work Orders	Update parts inventory in wvOASIS inventory function based on any parts credited in a work order (returned to inventory).	Customization	Medium				
FLT-364	2	Fleet Management	Work Orders	Track maintenance against the warranty associated with each piece of equipment and/or components.	Off the Shelf			Work Order module		
FLT-365	2	Fleet Management	Work Orders	Capture cost avoidance information associated with maintenance against the warranty work performed on each vehicle and each piece of equipment and/or components.	Customization	Medium				
FLT-366	2	Fleet Management	Work Orders	Print warranty tracking and labels at time of repair.	Off the Shelf			Work Order module		
FLT-367	2	Fleet Management	Work Orders	Update equipment costs with recovered warranty dollars.	Off the Shelf			Work Order module		
FLT-368	2	Fleet Management	Work Orders	Integrate with wvOASIS accounts payable function to support payment for completed work orders via procurement card or warrant for external repairs and intergovernmental billing for repairs performed by one State agency for another agency.	Customization	Medium				
FLT-369	2	Fleet Management	Work Orders	Integrate with wvOASIS general ledger function to support intergovernmental billing for repairs performed by one State agency for another agency.	Customization	Medium				

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Data Fields

Req. #	Priority	Category	Sub-Category	Data Field Requirement	Vendor Response	Customization Estimate, if Applicable	Core Module(s)	Comments/Notes
FDF-001	1	Fleet Management	General	Store and display fleet/equipment class name, code, and description.	Off the Shelf			
FDF-002	1	Fleet Management	General	Store and display skills/certifications required by operator.	Off the Shelf			
FDF-003	1	Fleet Management	General	Store and display rental rate, cost per hour (for activity costing purposes).	Off the Shelf			
FDF-004	1	Fleet Management	General	Store Utilization entry.	Off the Shelf			
FDF-005	1	Fleet Management	General	Store and display fleet/equipment class name, code, and description.	Off the Shelf			
FDF-006	1	Fleet Management	General	Store and display skills/certifications required by operator.	Off the Shelf			
FDF-007	1	Fleet Management	General	Store and display rental rate, cost per hour (for activity costing purposes).	Off the Shelf			
FDF-008	1	Fleet Management	General	Store Utilization entry.	Off the Shelf			
FDF-009	2	Fleet Management	General	Store warranties for equipment and parts.	Off the Shelf			
FDF-010	1	Fleet Management	Inventory	Store and display fleet/equipment type name and class code.	Off the Shelf			
FDF-011	1	Fleet Management	Inventory	Store and display fleet/equipment unit ID number.	Off the Shelf			
FDF-012	1	Fleet Management	Inventory	Store and display manufacturer.	Off the Shelf			
FDF-013	1	Fleet Management	Inventory	Store and display make.	Off the Shelf			
FDF-014	1	Fleet Management	Inventory	Store and display model.	Off the Shelf			
FDF-015	1	Fleet Management	Inventory	Store and display serial number (16 to 20 alpha-numeric characters).	Off the Shelf			
FDF-016	1	Fleet Management	Inventory	Store and display USDOT number.	Off the Shelf			
FDF-017	1	Fleet Management	Inventory	Store and display 7 Digit ED number (WVDOT assigned equipment number) with possibility for expansion on the field.	Off the Shelf			
FDF-018	1	Fleet Management	Inventory	Store at least 30 preventive maintenance schedules applicable to each fleet/equipment unit; preventive maintenance schedules must be supported for time, miles/hours, fuel consumed, or any combination of all three.	Off the Shelf			
FDF-019	1	Fleet Management	Inventory	Store and display assigned organization.	Off the Shelf			
FDF-020	1	Fleet Management	Inventory	Store and display current location of equipment.	Off the Shelf			
FDF-021	1	Fleet Management	Inventory	Store and display prior history of equipment assignment.	Off the Shelf			
FDF-022	1	Fleet Management	Inventory	Store and display eligibility of the equipment to be pooled.	Off the Shelf			
FDF-023	1	Fleet Management	Inventory	Store and display fleet/equipment type name and class code.	Off the Shelf			
FDF-024	1	Fleet Management	Inventory	Store and display fleet/equipment unit ID number.	Off the Shelf			
FDF-025	1	Fleet Management	Inventory	Store and display manufacturer.	Off the Shelf			
FDF-026	1	Fleet Management	Inventory	Store and display make.	Off the Shelf			
FDF-027	1	Fleet Management	Inventory	Store and display model.	Off the Shelf			
FDF-028	1	Fleet Management	Inventory	Store and display serial number (16 to 20 alpha-numeric characters).	Off the Shelf			
FDF-029	1	Fleet Management	Inventory	Store and display USDOT number.	Off the Shelf			
FDF-030	1	Fleet Management	Inventory	Store and display prior history of equipment assignment.	Off the Shelf			
FDF-031	2	Fleet Management	Inventory	Store a minimum of 5 major component makes, models and serial #s per fleet/ equipment unit (e.g., chassis, engine).	Off the Shelf			
FDF-032	2	Fleet Management	Inventory	Store at least 15 warranties applicable to each fleet/equipment unit or major subcomponent of the fleet/equipment unit; warranties must be supported for time, miles or any combination of the two.	Off the Shelf			
FDF-033	2	Fleet Management	Inventory	Store unlimited notes for each fleet/equipment unit record.	Off the Shelf			
FDF-034	2	Fleet Management	Inventory	Store lease/rental information for any equipment which is leased.	Off the Shelf			
FDF-035	2	Fleet Management	Inventory	Store vendor identification number for lessor for external leases.	Off the Shelf			
FDF-036	2	Fleet Management	Inventory	Store lease term.	Off the Shelf			
FDF-037	2	Fleet Management	Inventory	Store lease start date.	Off the Shelf			
FDF-038	2	Fleet Management	Inventory	Store lease end date.	Off the Shelf			
FDF-039	2	Fleet Management	Inventory	Store lease payment terms (lease amount, period).	Off the Shelf			
FDF-040	2	Fleet Management	Inventory	Store lease payment due date.	Off the Shelf			
FDF-041	2	Fleet Management	Inventory	Store financing information for any fleet units which are financed.	Off the Shelf			
FDF-042	2	Fleet Management	Inventory	Store accidents involving a fleet unit.	Off the Shelf			
FDF-043	2	Fleet Management	Inventory	Store date of accident.	Off the Shelf			
FDF-044	2	Fleet Management	Inventory	Store employee operating fleet/equipment unit.	Off the Shelf			
FDF-045	2	Fleet Management	Inventory	Store other employees in fleet unit or working with equipment.	Off the Shelf			
FDF-046	2	Fleet Management	Inventory	Store accident description.	Off the Shelf			
FDF-047	2	Fleet Management	Inventory	Store names/contact information of non-State employees involved in incident/accident.	Off the Shelf			
FDF-048	2	Fleet Management	Inventory	Store work orders (multiple) associated with any repairs.	Off the Shelf			
FDF-049	2	Fleet Management	Inventory	Store other optional fields based on fleet class and/or fleet/equipment type.	Off the Shelf			
FDF-050	2	Fleet Management	Inventory	Store and display separate fields for Home and Controlling Organizations.	Off the Shelf			
FDF-051	2	Fleet Management	Inventory	Store and display warranty information and any recall history.	Off the Shelf			
FDF-052	2	Fleet Management	Inventory	Store and display repair history.	Off the Shelf			
FDF-053	2	Fleet Management	Inventory	Store and display history of equipment utilization.	Off the Shelf			
FDF-054	2	Fleet Management	Inventory	Store and display current equipment status (Active, Pooled, Reserved, Under Repair, Scheduled for Maintenance, etc.) - X,S,A,R,W,P. X=Down, S=Sale, A=Active, R=Repair, W=Warranty, and P=Pool	Off the Shelf			

WVDOT Fleet Management and Equipment Management Requirements Matrix
Fleet Management Data Fields

FDF-055	2	Fleet Management	Inventory	Store and display combined current equipment status of equipment units which are needed to be reserved as a unit; for example, a loader and hauler.	Off the Shelf			
FDF-056	2	Fleet Management	Inventory	Store a minimum 3 fuel types per fleet/equipment unit.	Off the Shelf			
FDF-057	2	Fleet Management	Inventory	Store work orders (multiple) associated with any repairs.	Off the Shelf			
FDF-058	2	Fleet Management	Inventory	Store and display warranty information and any recall history.	Off the Shelf			
FDF-059	3	Fleet Management	Inventory	Store vendor identification number for bank or finance company.	Does Not Meet			If the Vendor ID is part of a custom interface, to financial system, then this is possible.
FDF-060	3	Fleet Management	Inventory	Store loan date.	Off the Shelf			
FDF-061	3	Fleet Management	Inventory	Store loan start and end date.	Off the Shelf			
FDF-062	3	Fleet Management	Inventory	Store loan terms (rate, period, payment).	Off the Shelf			
FDF-063	3	Fleet Management	Inventory	Store loan payment due date.	Does Not Meet			
FDF-064	3	Fleet Management	Inventory	Store organization to whom loan payment is made (bank or other).	Does Not Meet			
FDF-065	3	Fleet Management	Inventory	Store loan payment location.	Does Not Meet			
FDF-066	3	Fleet Management	Inventory	Store loan payment address.	Does Not Meet			
FDF-067	2	Fleet Management	Motorpool	Store for each motor pool: unique motor pool identifier.	Off the Shelf			
FDF-068	2	Fleet Management	Motorpool	Store for each motor pool: unit.	Off the Shelf			
FDF-069	2	Fleet Management	Motorpool	Store for each motor pool: motor pool manager.	Off the Shelf			
FDF-070	2	Fleet Management	Motorpool	Store for each motor pool: pool location.	Off the Shelf			
FDF-071	2	Fleet Management	Motorpool	Store for each motor pool: unique motor pool identifier.	Off the Shelf			
FDF-072	2	Fleet Management	Motorpool	Store for each motor pool: unit.	Off the Shelf			
FDF-073	2	Fleet Management	Motorpool	Store for each motor pool: motor pool manager.	Off the Shelf			
FDF-074	2	Fleet Management	Motorpool	Store for each motor pool: pool location.	Off the Shelf			
FDF-075	1	Fleet Management	Parts Inventory	Store part type code.	Off the Shelf			
FDF-076	2	Fleet Management	Parts Inventory	Store part number.	Off the Shelf			
FDF-077	2	Fleet Management	Parts Inventory	Store manufacturer.	Off the Shelf			
FDF-078	2	Fleet Management	Parts Inventory	Store manufacturer part number.	Off the Shelf			
FDF-079	2	Fleet Management	Parts Inventory	Store serial number.	Off the Shelf			
FDF-080	2	Fleet Management	Parts Inventory	Store alternate part number.	Off the Shelf			
FDF-081	2	Fleet Management	Parts Inventory	Store description.	Off the Shelf			
FDF-082	2	Fleet Management	Parts Inventory	Store part usage codes (multiple).	Off the Shelf			
FDF-083	2	Fleet Management	Parts Inventory	Store part reference fields (multiple).	Off the Shelf			
FDF-084	2	Fleet Management	Parts Inventory	Store cross reference fields (multiple).	Off the Shelf			
FDF-085	2	Fleet Management	Parts Inventory	Store part usage codes (multiple).	Off the Shelf			

WVDOT Fleet Management and Equipment Management Requirements Matrix
Management Reporting Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-001	1	Management Reporting	General	Provide a wide range of pre-defined reports that support day-to-day fleet management, work management and planning and budgeting business functions. Reports should be able to be scheduled and automatically generated and distributed (pushed to the user) by the operational system at a user defined time for publication.	Off the Shelf			Reports Module		
RPT-002	2	Management Reporting	General	Provide capability to copy and modify existing reports as the basis for a new report.	Off the Shelf			Ad hoc Reporting		
RPT-003	2	Management Reporting	General	Provide tools within the Vendor solution to configure new reports.	Off the Shelf			Ad hoc Reporting		
RPT-004	3	Management Reporting	General	Provide an ad-hoc query tool within the Vendor solution. The adhoc query toolset within the Vendor solution will not require knowledge and training on its own proprietary language for the majority of users (non power users).	Off the Shelf			Ad hoc Reporting		Fully Supported Users without Crystal Reports experience or access to the development software can utilize the Ad-Hoc Reporting tool to create reports directly within the program. Ad-Hoc reports may be saved, shared, exported, and are viewable directly within the web portal, providing real time access to data. All database tables, including user-defined fields, are reportable and AssetWorks does not restrict the data. Reports may also be embedded on any portal screen of a user's workflow for auto-update and display of multiple reports in a single view.
RPT-005	2	Management Reporting	General	Provide the ability to utilize JasperReports with the EAMS database	Customization	Medium	Within 12 months			
RPT-006	3	Management Reporting	General	Provide the ability to integrate other third-party reporting tools (Crystal Reports, PowerBI, etc.) with the Vendor solution.	Off the Shelf			Reporting module		
RPT-007	2	Management Reporting	General	Provide an entity relationship diagram(s) to support development of end-user reports through the ad-hoc query tool within the Vendor solution or a third-party reporting application.	Off the Shelf			Ad hoc Reporting		
RPT-008	2	Management Reporting	General	Provide ability to view key performance indicators and other organizational performance data on a user-friendly intuitive dashboard.	Off the Shelf			Dashboard/KPIs		
RPT-009	1	Management Reporting	General	Provide the capability to integrate with a future WVDOT business intelligence environment.	Customization	Medium	Within 12 months			
RPT-010	1	Management Reporting	General	Provide a solution which is architected to support the ability to have 24-hour/7 day a week access (excluding defined maintenance windows) to the reporting functions.	Off the Shelf			Reporting module		
RPT-011	2	Management Reporting	General	Provide user access to predefined reports available withinthe Vendor solution without requiring the installation of any client software.	Off the Shelf			Reporting module		
RPT-012	2	Management Reporting	General	Provide user access to the functionality of the adhoc query tool for a minimum of 80% of the available functionality without requiring the installation of any client software (it is recognized that some capabilities utilized by power users may require the installation of additional software on the client desktop).	Off the Shelf			Reporting module		
RPT-013	2	Management Reporting	General	Provide user access to the forecasting capabilities within the Vendor solution for a minimum of 50% of the available forecasting capabilities without requiring the installation of any client software.	Off the Shelf			Reporting module		Fully supported in the CAM module. No installs of client software are needed with any functionality within CAM.
RPT-014	2	Management Reporting	General	Provide user access to analysis, modeling and dashboarding tools within the Vendor solution for a minimum of 50% of the available capabilities within these functions without requiring the installation of any client software.	Off the Shelf			Reporting module		Fully supported in the CAM module. No installs of client software are needed with any functionality within CAM.
RPT-015	1	Management Reporting	General	Leverage the roles and security definitions that will be deployed for the main Fleet Management product within the reporting and business function to minimize duplication of security administration functions.	Off the Shelf			Reporting module		
RPT-016	2	Management Reporting	General	Support utilization of the same hardware and operating system specifications (architectural landscape) that are required for the operational platform for the reporting environment to the extent feasible.	Off the Shelf			Reporting module		
RPT-017	2	Management Reporting	General	Provide a reporting solution which is architected to allow sizing of data repositories to meet changing business needs allowing clients and servers to be added, upgraded or removed as computing capacity needs change, without reconfiguring the operational system or reporting environment.	Off the Shelf			Reporting module		

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-018	2	Management Reporting	Report Portal	Provide users with a personalized report portal that allows access to only those reports that the user is authorized to see consistent with role-based security definitions.	Off the Shelf			Reporting module		
RPT-019	3	Management Reporting	Report Portal	Display on the reports portal a list of reports that have been distributed to the user (i.e. the user has been granted authorization to view a report by the designated report publisher/owner).	Off the Shelf			Reporting module		
RPT-020	3	Management Reporting	Report Portal	Display on the reports portal a list of saved personalized reports and ad-hoc queries that the user has authority to either create or modify in the user's personal reports list.	Off the Shelf			Reporting module		
RPT-021	3	Management Reporting	Report Portal	Allow users to search existing reports inventory and subscribe to reports after requesting and receiving permission from the report owner/publisher.	Off the Shelf			Reporting module		
RPT-022	3	Management Reporting	Report Portal	Provide the ability for designated report publishers to un-publish reports to individual users or groups of users, with the un-publication subject to approval based on WVDOT business rules.	Off the Shelf			Reporting module		
RPT-023	3	Management Reporting	Report Portal	Allow end-users to share saved personalized reports and ad-hoc queries for use by another user.	Off the Shelf			Reporting module		
RPT-024	3	Management Reporting	Report Portal	Allow end-users to delete shared reports from their personal reports list without deleting the shared report from another user's personal reports list.	Off the Shelf			Reporting module		
RPT-025	3	Management Reporting	Report Portal	Allow users to refresh (run) saved personal reports or ad-hoc queries from the portal with an option to run in the background and send a notification to the user upon completion.	Does Not Meet			Reporting module		
RPT-026	3	Management Reporting	Standard Report Features	Allow users to execute reports and modify report query parameters on-line and allow users to save modified report parameter sets as personal versions without impacting the base query.	Off the Shelf			Reporting module		
RPT-027	2	Management Reporting	Standard Report Features	Provide drill down capability from summary information to the supporting detail transactions and drill up from the detail transaction to the summary information.	Off the Shelf			Reporting module		
RPT-028	2	Management Reporting	Standard Report Features	Provide, as part of drill down functionality, the ability to print the expanded sections of the drill down results with the content of the original query results.	Off the Shelf			Reporting module		
RPT-029	3	Management Reporting	Standard Report Features	Link the report generator directly to the data dictionary to provide point and click data item selection and drag-and-drop formatting by the user.	Off the Shelf			Reporting module		
RPT-030	3	Management Reporting	Standard Report Features	Allow users to define or modify the sort order of reports.	Does Not Meet					
RPT-031	3	Management Reporting	Standard Report Features	Allow users to search for data, transactions or documents using a range of data values.	Off the Shelf			Reporting module		
RPT-032	3	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform a search within a report output/results set.	Off the Shelf			Reporting module		
RPT-033	3	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform searches with full "if..then..else" logic within a report output/results set.	Off the Shelf with Configuration			Reporting module		
RPT-034	4	Management Reporting	Standard Report Features	Provide authorized users with the capability to perform free-form text searching within a report output/results set. Search capability shall include the specification of words that are in a given range of words and shall include embedded, attached or linked documents.	Does Not Meet					
RPT-035	2	Management Reporting	Standard Report Features	Present data in both tabular and graphical formats.	Off the Shelf			Reporting module		
RPT-036	3	Management Reporting	Standard Report Features	Provide reporting and analytical capabilities with a similar user interface/user experience to the extent practical as other Fleet Management system functions (reporting toolset should not have a significantly different look and feel to the end user from other parts of the Vendor system).	Off the Shelf			Reporting module		
RPT-037	3	Management Reporting	Standard Report Features	Provide ability to allow the results from any online search or query performed within the Vendor solution to be printed.	Off the Shelf			Reporting module		
RPT-038	2	Management Reporting	Standard Report Features	Provide standard print capabilities such as those typically available in Windows-based products such as print preview, print a range of pages, print a number of copies, etc.	Off the Shelf			Reporting module		
RPT-039	2	Management Reporting	Standard Report Features	Provide ability to schedule a report to run automatically if certain conditions (business rules) are met.	Does Not Meet					
RPT-040	2	Management Reporting	Standard Report Features	Support export of query and report results as an external database (for example in Microsoft Access or SQL Server readable formats).	Off the Shelf			Reporting module		

WVDOT Fleet Management and Equipment Management Requirements Matrix
Management Reporting Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-041	2	Management Reporting	Standard Report Features	Support export of query and report results in a variety of different industry standard formats including but not limited to .xls or .xlsx, .doc or .docx, PDF, .txt, XML, ASCII, comma delimited, tab delimited, etc.	Off the Shelf			Reporting module		
RPT-042	3	Management Reporting	Standard Report Features	Provide for report distribution based on events, process milestones, or predefined data thresholds or values, e.g., based on data values contained within the report (i.e., conditional operators >, <, =, etc.)	Customization	Medium	Within 12 months			
RPT-043	3	Management Reporting	Standard Report Features	Provide the capability to integrate third party report distribution software solutions.	Customization	Medium	Within 12 months			
RPT-044	3	Management Reporting	Standard Report Features	Provide functionality to distribute reports by a variety of methods such as sending links to reports via email, web, fax, or PDA.	Does Not Meet					
RPT-045	3	Management Reporting	Standard Report Features	Support effective date selection and query including Boolean operations such as date ranges.	Off the Shelf			Reporting module		
RPT-046	3	Management Reporting	Standard Report Features	Provide functionality for the user to incorporate formulas, functions, and mathematical calculations into reports as well as typical grouping, mathematical and statistical functions on data in reports (such as sum, count, average, etc.)	Off the Shelf			Reporting module		
RPT-047	3	Management Reporting	Standard Report Features	Provide the ability to create and specify report templates.	Off the Shelf			Reporting module		
RPT-048	3	Management Reporting	Standard Report Features	Provide wizards to guide the users through report building steps.	Off the Shelf			Reporting module		
RPT-049	3	Management Reporting	Standard Report Features	Provide cursor selection and drag-and-drop features to assist users in formatting of files, elements, and operands (e.g., +,-, /, *) from data dictionary or other pre-established lists.	Off the Shelf			Reporting module		
RPT-050	3	Management Reporting	Standard Report Features	Provide graphical report layout tools and drag-and-drop features to assist users in formatting reports and inquires.	Off the Shelf			Reporting module		
RPT-051	3	Management Reporting	Standard Report Features	Provide support for graphical data visualization features including but not limited to stacked bar charts, min/mid/max line graphs, regression lines, dashboard gauges, etc.	Off the Shelf with Configuration			Reporting module		
RPT-052	3	Management Reporting	Standard Report Features	Provide ability to link from reporting tool to Microsoft Office graphic, spreadsheet and presentation applications.	Customization	Medium				
RPT-053	3	Management Reporting	Ad-hoc Query	Allow users to build ad-hoc queries to report on any fields in the Vendor solution for which they are authorized using one or more of a combination of different criteria; provide online access to a date dictionary showing data element and table to assist query building.	Off the Shelf			Reporting module		
RPT-054	3	Management Reporting	Ad-hoc Query	Allow a user to save an ad-hoc query for later execution without impacting any base query that was used as a start point.	Off the Shelf			Reporting module		
RPT-055	3	Management Reporting	Ad-hoc Query	Display a user's saved ad-hoc queries by descriptive name on the user's report portal.	Off the Shelf			Reporting module		
RPT-056	3	Management Reporting	Ad-hoc Query	Allow a user to authorize one or more additional users to have access to a saved ad-hoc query through the report portal.	Off the Shelf			Reporting module		
RPT-057	3	Management Reporting	Ad-hoc Query	Display any ad-hoc queries that are authorized (shared) by one user for use by a second user on the second user's report portal.	Off the Shelf			Reporting module		
RPT-058	2	Management Reporting	Ad-hoc Query	Provide ability to track data by user-defined performance indicators.	Off the Shelf with Configuration			Reporting module		
RPT-059	2	Management Reporting	Report Administration	Provide a solution architected so as to centrally manage the reporting tool set to ensure that any updates are distributed to users and that all users are accessing the same version of the reporting software.	Off the Shelf			Reporting module		
RPT-060	1	Management Reporting	Report Administration	Ensure solution is architected so system performance is not impacted when a large report or inquiry is being run.	Off the Shelf			Reporting module		
RPT-061	3	Management Reporting	Report Administration	Provide the ability to schedule, view and modify the start time for batch printing including any dependencies on certain business conditions or events; provide option to restrict batch printing of large volume outputs by job or to certain authorized users to minimize on paper usage.	Does Not Meet					
RPT-062	1	Management Reporting	Report Administration	Enable users to run ad hoc reports and queries without degradation of system performance.	Off the Shelf with Configuration			Reporting module		
RPT-063	2	Management Reporting	Report Administration	Allow the system administrator or other authorized user to define limits on the execution time for a report or query and/or the numbers being retrieved.	Does Not Meet					
RPT-064	2	Management Reporting	Report Administration	Cancel automatically a query or report job if it fails to meet system administrator defined criteria (e.g., time limits, infinite loops, excessive pages, etc.).	Does Not Meet					
RPT-065	2	Management Reporting	Report Administration	Provide the ability for authorized users or system administrator to terminate any query or report that significantly reduces system performance.	Does Not Meet					

WVDOT Fleet Management and Equipment Management Requirements Matrix
Management Reporting Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core EAM Module(s)	Third Party Solution(s)	Comments/Notes
RPT-066	3	Management Reporting	Report Administration	Allow system administrator or other authorized user to override parameters for an individual query or report.	Off the Shelf			Reporting module		
RPT-067	3	Management Reporting	Report Administration	Provide functionality to audit exports of report data and modifications to report definitions.	Off the Shelf			Reporting module		
RPT-068	2	Management Reporting	Report Administration	Provide the ability to configure reports such that information can be suppressed based on a user's role.	Off the Shelf			Reporting module		
RPT-069	2	Management Reporting	Report Administration	Provide reports on user production statistics by user ID, time of day, length of job, etc. to determine who is viewing a report, what reports are being used and resources consumed by department/user suitable for billing purposes.	Off the Shelf			Reporting module		
RPT-070	2	Management Reporting	Report Administration	Maintain an active metadata repository that contains definitions of all data elements and attributes within the Vendor'ssolution (maintain both product meta-data and user configured changes).	Customization	Large	Within 18 months			The actual FleetFocus database retains all this information but if an export to a data warehouse is sought, that is a customization.

WVDOT Fleet Management and Equipment Management Requirements Matrix
Application Architecture Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core Module(s)	Third Party Solution(s)	Comments/Notes
APP-001	1	Application Architecture	General	Provide a suite of fully-integrated application modules in which data captured in one module is readily available for use and updated as appropriate in other modules of the system.	Off the Shelf				No	
APP-002	1	Application Architecture	General	Provide ability to share all related business information across functional areas and organizations, subject to application security and user-defined business rules and security considerations.	Off the Shelf				No	
APP-003	1	Application Architecture	General	Provide an integrated data management structure that is utilized across the proposed software solution minimizing system processing or administration required on the data integration points.	Off the Shelf					
APP-004	1	Application Architecture	General	Provide user-controlled definition and maintenance of system values and business rules in tables, system configuration files, coding, and business rules in data structures and interfaces without requiring programmer intervention to modify and providing the capability for an application administrator or other authorized users to manage and maintain system configurations, settings, and data tables.	Off the Shelf					
APP-005	2	Application Architecture	General	Update all related modules and tables immediately with a single entry; that is, any change to a project attribute or project status information is made only once but takes effect throughout the system.	Off the Shelf					
APP-006	2	Application Architecture	General	Provide means of altering tables and/or data structures to support user-defined fields and capability for system administrator or other authorized users to create new data items on-line and automatically update a global data dictionary with these new elements.	Off the Shelf					
APP-007	2	Application Architecture	General	Provide application administrator or other authorized user with screen layout configuration capabilities including movement of fields on the screen and/or across tables, removal of fields, addition of user-defined fields, reorder or consolidation of tables, buttons to enable prints and selection of related reports, links to other business objects (such as CAD drawings, user manuals, project records, contract records, etc.)	Off the Shelf with Configuration					
APP-008	2	Application Architecture	General	Support consistency in terms of field labels such that a screen label defined in one place would be referred to in the same way everywhere and separated by line of business, role, etc.	Does Not Meet					
APP-009	2	Application Architecture	General	Within the system, utilize a design which provides the end user with a perspective of real-time update of data (even if some processes may be happening in the background to complete database updates); that is, users should not be required to toggle back and forth from a screen being used to perform a business process using a job queue to check the status of a batch/background task being able to proceed to the next screen in a series of screens required to perform a specific business function/task.	Off the Shelf					
APP-010	2	Application Architecture	General	Perform transactions in real-time in the sense that online access will display the most current element value (e.g., if a user changes the value of a data element on one screen, the newly changed data value will be shown when the user moves to another screen with that same data element).	Off the Shelf					
APP-011	1	Application Architecture	General	Edit all system input according to user-defined business rules so that the rules are appropriately and consistently applied and data is validated at the time the data is entered into the system (on-line or via a batch transaction).	Off the Shelf					
APP-012	2	Application Architecture	General	Utilize effective-dated transactions and table updates (either dated for future action or dated to be retroactive) with the ability to specify data edits by type of transaction.	Off the Shelf					
APP-013	2	Application Architecture	General	Support multiple concurrent application sessions for each user; each concurrent session must be able to support the same security profile or a different profile if the user has multiple profiles.	Off the Shelf					
APP-014	2	Application Architecture	General	Provide capability for a user to have multiple screens or tabs open within a single user session.	Off the Shelf					
APP-015	2	Application Architecture	General	Maintain security logs and audit trails distinctly for each concurrent user session.	Off the Shelf with Configuration					
APP-016	2	Application Architecture	General	Support encryption, masking, or hiding of any fields with restricted access to only authorized users by department/business unit and role and responsibility.	Off the Shelf with Configuration					
APP-017	2	Application Architecture	General	Provide capability to indicate at the field level user classes or individual users who are authorized to view masked or encrypted fields.	Off the Shelf with Configuration					
APP-018	2	Application Architecture	General	Allow display of masked, hidden, or encrypted fields by an authorized user.	Off the Shelf with Configuration					
APP-019	1	Application Architecture	General	Comply with the Rehabilitation Act of 1973 and Americans with Disabilities Act (ADA) Section 508 standards for accessibility of all system functions.	Off the Shelf					
APP-020	1	Application Architecture	User Interface	Utilize a consistent user interface across the software (excluding proposed third party solutions) including user definable hot keys; screen naming functions; navigation patterns; consistent use of controls; and online help and menus (as defined by the user's security profile).	Off the Shelf					
APP-021	2	Application Architecture	User Interface	Ensure messages appear in a consistent format across all system functions for both batch and on-line processing.	Off the Shelf					
APP-022	2	Application Architecture	User Interface	Allow manual entry and also context specific drop-down lists of all valid values for each validated field where appropriate.	Off the Shelf					
APP-023	2	Application Architecture	User Interface	Provide immediate transfer/paste of value(s) from a "pop up" list of values tables to the appropriate field when selected.	Off the Shelf					
APP-024	2	Application Architecture	User Interface	Architect so as to have interfaces proceed directly and automatically to the next appropriate field when data is entered, for example "Tabbing" through fields in a defined sequence.	Does Not Meet					
APP-025	2	Application Architecture	User Interface	Allow user to directly access other input screens and modules without need for backing out of menus or menu paths.	Off the Shelf					
APP-026	2	Application Architecture	User Interface	Allow navigation between multiple, related input screens without losing any information input on the original (or header) screen.	Off the Shelf					
APP-027	2	Application Architecture	User Interface*	Allow user to move backward within a menu structure and screens without losing previously entered data.	Off the Shelf					
APP-028	2	Application Architecture	User Interface	Allow a user to cancel transaction and/or exit any document or screen without saving changes.	Off the Shelf					
APP-029	1	Application Architecture	User Interface	Support cut and paste for copying data between screens.	Off the Shelf					
APP-030	2	Application Architecture	User Interface	Provide a display that indicates (e.g., highlighting) all required fields for entry on any screen.	Off the Shelf					

APP-031	2	Application Architecture	User Interface	Provide a search and filter capability on user screens containing columns of data.	Off the Shelf					
APP-032	2	Application Architecture	Functions and Features	Support use of keyboard data entry only (i.e., allow screen functions to be performed without use of a mouse).	Off the Shelf					
APP-033	1	Application Architecture	Functions and Features	Support the generation of email messages by the system based on various system/business events utilizing SMTP for outbound messages.	Off the Shelf with Configuration					
APP-034	2	Application Architecture	Functions and Features	Allow any master record or validation table entry to be activated or inactivated.	Off the Shelf					
APP-035	1	Application Architecture	Functions and Features	Provide for wildcard, partial, and multi-term searches; include ability to define must-have and optional criteria.	Off the Shelf					
APP-036	2	Application Architecture	Functions and Features	Provide capability to auto-populate the value of a field based on the value of a previously entered field using user-defined business rules and/or validations.	Off the Shelf					
APP-037	2	Application Architecture	Functions and Features	Allow overriding of system or user-defined defaults based on business rules with an audit trail within individual functions.	Off the Shelf					
APP-038	2	Application Architecture	Functions and Features	Allow for descriptions on all transactions.	Off the Shelf					
APP-039	2	Application Architecture	Functions and Features	Provide/support spell check capability.	Off the Shelf					
APP-040	2	Application Architecture	Functions and Features	Support text formatting in the system (i.e., the ability to support mixed case letters, word wrap, line wrap, and character count when there is a limit, etc.)	Off the Shelf					
APP-041	2	Application Architecture	Functions and Features	Provide query features that supports alternate field lookup (e.g., using item name to look up item code or project name to look-up project number).	Off the Shelf					
APP-042	2	Application Architecture	Functions and Features	Provide table look-up fields that can be linked to or refer to other tables.	Off the Shelf					
APP-043	2	Application Architecture	Functions and Features	Utilize effective and expiration dates to version reference tables and data.	Off the Shelf					
APP-044	1	Application Architecture	Functions and Features	Provide capability to add, change, and inactivate reference tables in both batch and on-line mode.	Off the Shelf					
APP-045	2	Application Architecture	Functions and Features	Provide capability to recognize and capture rejected (bypassed) transactions for review, correction and reprocessing; Place batch loaded reference data into a suspended state if errors exist in non-key fields. This process should be non-blocking and the processing should continue.	Off the Shelf					
APP-046	2	Application Architecture	Functions and Features	Provide capability to perform cross-reference table validations.	Off the Shelf					
APP-047	1	Application Architecture	Functions and Features	Support use of "digital signatures" or "online approvals" to initiate or approve a business event within the system using user authentication within the system via validation of user credentials at the time the user signed on to the system; Support these digital signatures for approvals and rejections of workflow tasks.	Off the Shelf					
APP-048	2	Application Architecture	Functions and Features	Provide ability to integrate with third-party eSignature solutions to support electronic signature approval processes initiated within the software solution.	Customization	Medium	Within 12 months	Within 12 months	Yes	
APP-049	2	Application Architecture	Functions and Features	Support mass changes to defined groups of transactions or data with appropriate audit trail.	Off the Shelf					
APP-050	2	Application Architecture	Functions and Features	Provide capability to review and approve a batch load prior to execution.	Off the Shelf					
APP-051	2	Application Architecture	Functions and Features	Provide capability to back out (rollback) previously executed batch loads.	Off the Shelf					
APP-052	2	Application Architecture	Functions and Features	Provide capability to define/set-up batch checkpoints.	Does Not Meet					
APP-053	2	Application Architecture	Functions and Features	Provide a sequential unique identifier for a batch process.	Off the Shelf					
APP-054	3	Application Architecture	Functions and Features	Support ability to add printable and non-printable notes to any field or document.	Off the Shelf					
APP-055	2	Application Architecture	Functions and Features	Support creation of user-defined form letters or business forms using system-defined naming standards configurable by the system administrator or authorized user.	Does Not Meet					
APP-056	2	Application Architecture	Functions and Features	Provide capability to set-up standard document and letter templates at the department/business unit level for use throughout the system with names, titles, labels, pre-defined backgrounds, etc. using system-defined naming standards configurable by the system administrator or authorized user.	Does Not Meet					
APP-057	2	Application Architecture	Functions and Features	Provide automatic date and time stamping of all documents generated by the system.	Off the Shelf					
APP-058	2	Application Architecture	Functions and Features	Provide functionality to copy a document in order to create a new document of the same type.	Does Not Meet					
APP-059	2	Application Architecture	Functions and Features	Generate special clauses on documents as defined by users or by standard clauses.	Does Not Meet					
APP-060	2	Application Architecture	Functions and Features	Provide ability to view multiple different file formats for attachment in all modules/functions including, but not limited to, Microsoft Office products, PDFs, and image file formats.	Off the Shelf					
APP-061	2	Application Architecture	Functions and Features	Support ability to use the "print screen" function on any screen.	Off the Shelf					
APP-062	1	Application Architecture	Functions and Features	Provide ability for authorized end-users to import from a .xls, csv, or a text file meeting import formatting requirements.	Off the Shelf with Configuration					
APP-063	1	Application Architecture	Workflows	Provide tools to model and modify pre-existing workflows or create new workflows (the workflows shall be implementable globally or by specific business units).	Off the Shelf with Configuration					
APP-064	1	Application Architecture	Workflows	Support establishment of user-defined rules-based workflows for any system event or transaction.	Off the Shelf with Configuration					
APP-065	2	Application Architecture	Workflows	Provide bi-directional electronic routing of documents for approval or other tasks through workflow.	Does Not Meet					
APP-066	2	Application Architecture	Workflows	Support routing of workflow to multiple destinations based on various user-defined criteria.	Off the Shelf with Configuration					
APP-067	2	Application Architecture	Workflows	Integrate with Active Directory to access organizational hierarchies and incumbent information for current employees in order to establish workflow routings.	Customization	Small	Within 12 months			
APP-068	2	Application Architecture	Workflows	Support parallel approvals and single-threaded approvals in the same approval path.	Does Not Meet					
APP-069	2	Application Architecture	Workflows	Reverse any approvals and return the workflow transaction to the originating user and any other users who had previously approved the transaction in the event that one or more reviewers disapproves a transaction.	Off the Shelf with Configuration					
APP-070	2	Application Architecture	Workflows	Allow workflow destination to be defined as specific users or a class of users or by using some other user-defined criteria.	Off the Shelf with Configuration					

APP-071	1	Application Architecture	Workflows	Allow for copying/extending preconfigured workflows to meet specific business requirements.	Off the Shelf with Configuration					
APP-072	1	Application Architecture	Workflows	Support definition of workflow events based on user-defined criteria including transaction code; department/business unit; user roles and responsibilities; user position in organization; data values and other user-defined values or parameters.	Off the Shelf with Configuration					
APP-073	2	Application Architecture	Workflows	Allow user-defined standard approval timeframes.	Does Not Meet					
APP-074	2	Application Architecture	Workflows	Allow user-defined alternative approval paths.	Does Not Meet					
APP-075	1	Application Architecture	Workflows	Support multiple levels of approvals for transactions based on profile security and other user-defined criteria.	Off the Shelf with Configuration					
APP-076	1	Application Architecture	Workflows	Allow a user to enter descriptive information in a note field or to upload and attach a file (Microsoft Office, Microsoft Office 365, PDF, JPEG, etc.) to content items within the workflow and store those notes with user id and date/time stamp.	Off the Shelf					
APP-077	2	Application Architecture	Workflows	Allow workflows to be designated as either 'informational' or 'action (such as approval) required.	Off the Shelf with Configuration					
APP-078	2	Application Architecture	Workflows	Ensure a transaction is not finalized until all required approval workflows are complete.	Off the Shelf with Configuration					
APP-079	2	Application Architecture	Workflows	Allow a workflow to be designed to support either simultaneous actions or require consecutive actions, as defined by an authorized user.	Does Not Meet					
APP-080	1	Application Architecture	Workflows	Provide a dashboard which displays the status of workflows including workflows pending for a user-defined period of time.	Does Not Meet					
APP-081	1	Application Architecture	Workflows	Provide capability for personnel, or their supervisors to delegate their approval authority to another individual or work group, along with allowing the delegate to access their "inbox" should that be desired by the user. This function is primarily to allow for coverage when an employee is out on leave.	Does Not Meet					
APP-082	2	Application Architecture	Workflows	Provide email notification of workflow items.	Off the Shelf with Configuration					
APP-083	2	Application Architecture	Workflows	Provide capability to allow an application system administrator to authorize a user to be able to opt in/opt out of email notifications.	Off the Shelf with Configuration					
APP-084	2	Application Architecture	Workflows	Allow user with appropriate authorization to disable email notification (opt in/opt out capability).	Off the Shelf with Configuration					
APP-085	2	Application Architecture	Workflows	Provide integrated workflow error handling.	Off the Shelf					
APP-086	2	Application Architecture	Workflows	Track workflow approvals and rejections.	Off the Shelf with Configuration					Any inherent configuration and workflows will track approval/rejection. Anything outside of standard functionality would require custom work.
APP-087	1	Application Architecture	Workflows	Support various user-defined transaction statuses, including approved, rejected, pending, under consideration, etc.	Off the Shelf with Configuration					
APP-088	1	Application Architecture	Workflows	Provide for the display of the status of items submitted to a workflow at any time.	Off the Shelf with Configuration					
APP-089	1	Application Architecture	Workflows	Maintain document status based on routing and approvals and allow authorized users to determine where the document is in the routing process.	Customization	Medium	Within 12 months			
APP-090	2	Application Architecture	Workflows	Notify users automatically via email when items in their "inbox" have gone unprocessed for a user-defined period of time.	Customization	Medium	Within 12 months			
APP-091	2	Application Architecture	Workflows	Route transactions automatically to a workgroup after a specific time of inaction (based on user-defined criteria).	Customization	Medium	Within 12 months			
APP-092	2	Application Architecture	Workflows	Allow steps in the workflow to be bypassed by allowing approvers higher in the approval chain to approve transactions. Should this transaction be in the "inbox" of an approver lower in the approval chain automatically remove transaction from lower approver's inbox.	Customization	Medium	Within 12 months			
APP-093	2	Application Architecture	Workflows	Support the use of a "master approver" for each workflow who may approve a transaction at any time whether included in the normal workflow or not.	Customization	Medium	Within 12 months			
APP-094	1	Application Architecture	Mobile Technology	System should be "mobile-friendly" for mobile platforms/environments including IOS and Android.	Off the Shelf					
APP-095	1	Application Architecture	Mobile Technology	Utilize responsive design to ensure that web pages display accurately on a range of screen sizes and aspect ratios including smart phones, desktops, tablets, etc.	Off the Shelf					
APP-096	1	Application Architecture	Security	Comply with WVDOT and any applicable State of West Virginia security policies.	Off the Shelf with Configuration					
APP-097	1	Application Architecture	Security	Comply with encryption requirements in Internal Revenue Service Publication 1075.	Off the Shelf with Configuration					
APP-098	1	Application Architecture	Security	Comply with Federal Information Processing Standard (FIPS) 140 or most current.	Off the Shelf with Configuration					
APP-099	1	Application Architecture	Security	Comply with ISO/IEC 15408: Common Criteria for Information Technology Security Evaluation.	Off the Shelf with Configuration					
APP-100	1	Application Architecture	Security	Support digital certificates.	Off the Shelf with Configuration					
APP-101	1	Application Architecture	Security	Support public key infrastructure (PKI).	Off the Shelf with Configuration					
APP-102	1	Application Architecture	Security	Support Transport Layer Security (TLS) > 1.2.	Off the Shelf with Configuration					
APP-103	1	Application Architecture	Security	Provide an efficient, flexible way to control and administer access to all components of the solution using role-based security.	Off the Shelf with Configuration					
APP-104	1	Application Architecture	Security	Provide role-biased security and privileges and access rights by position and department/business unit.	Off the Shelf with Configuration					
APP-105	1	Application Architecture	Security	Provide granular management and administrator control over transactions, forms access, field updates, row locking, interfacing events, data queries and other types of authorizations using role-based security.	Off the Shelf with Configuration					
APP-106	1	Application Architecture	Security	Provide capability to establish "security profiles" or templates by user-defined job category or role, and to apply the templates to individuals and to user groups to grant privileges.	Off the Shelf with Configuration					
APP-107	1	Application Architecture	Security	Restrict display of system functions upon sign-in to the software to only the options, functions, menu selections, screens, and data fields to which the user or business unit has rights to.	Off the Shelf with Configuration					

APP-108	1	Application Architecture	Security	Provide ability to ensure that if two or more distinct security roles are needed to perform a business function and all needed roles are held by the same user, the user must log on separately under each security role in order to perform the full business transaction. Further, if a user has approval privileges over a business process that they also enter data for, the user shall NOT be able to approve their own work or requests. User-generated work or requests must be approved by a different/independent approver (such as a supervisor).	Off the Shelf with Configuration					
APP-109	1	Application Architecture	Security	Provide ability for the system within the security function of the application to allow an authorized user to configure available controls, actions, and access for interfaces based upon user role / privileges.	Off the Shelf with Configuration					
APP-110	1	Application Architecture	Security	Integrate with Active Directory to define users to the system, including following user information: unique user identification; user first name; user last name; department/business unit; user email address; and effective date of user access to the system.	Customization	Medium	Within 12 months			
APP-111	1	Application Architecture	Security	Allow the system administrator or other authorized users to define user access groups based on job responsibilities to ensure separation of duties; the system administrator must be able to define a group name, a description of the role and capabilities of the user group. Additional fields may be offered for further separation, finer grouping.	Off the Shelf with Configuration					
APP-112	1	Application Architecture	Security	Integrate with Active Directory to obtain user groups and assignments of users to those groups. Provide capability to grant user groups access to each system function and establish the type of access to be allowed (add, change, inquire, delete) along with an effective start and end date for this access.	Customization	Small	Within 12 months			
APP-113	1	Application Architecture	Security	Allow system administrator, or other authorized user, to assign users to one or more user groups including an effective-date and optional end-date for inclusion in each user group.	Does Not Meet					
APP-114	1	Application Architecture	Security	Allow system administrator or other authorized users to remove users from one or more user groups including recording of an effective date for end of inclusion in each user group.	Does Not Meet					
APP-115	2	Application Architecture	Security	Log incidents of invalid password attempts which exceed a system-configurable maximum allowable number of attempts capturing user identification entered, type of violation (invalid user id, invalid password or invalid id and password) and date and time of the violation; place the incident log in the audit trail log.	Off the Shelf					
APP-116	2	Application Architecture	Security	Log incidents of security violations within the system capturing user identification, IP address with X-Forward IP if load balancer is involved, system function for which unauthorized access was attempted and date and time of security violation.	Off the Shelf with Configuration					
APP-117	2	Application Architecture	Security	Allow the system administrator or authorized users to generate a formatted user-defined report of invalid password attempts or security violations within the system.	Off the Shelf					
APP-118	2	Application Architecture	Security	Provide an online function for review of the logs of invalid password attempts or security violations by the system administrator or other authorized users.	Off the Shelf with Configuration					
APP-119	1	Application Architecture	Security	Ensure report and ad-hoc query results are subject to the system security model such that users cannot access data through reports and queries for which they are not authorized in the operational system.	Off the Shelf					
APP-120	1	Application Architecture	Security	Support access to the software solution by authorized third-party business partners through VPN or VDI technology, subject to WVDOT and state of West Virginia security procedures for external access.	Customization	Medium	Within 12 months			
APP-121	1	Application Architecture	Security	Provide capability for the system to allow users to choose from a list of security roles (user or group based) if the user has more than one role available to them.	Off the Shelf					
APP-122	2	Application Architecture	Security	Provide capability for the system administrator or an authorized user to delegate proxy roles to other users with an expiration date, and provide capability to notify user of the new proxy; Start and end dates shall be within 30 calendar days of each other.	Does Not Meet					
APP-123	1	Application Architecture	Security	Allow system administrator or other authorized user to define the allowable period for user inactivity while logged on; such time shall be consistent with WVDOT and State of West Virginia security policy.	Off the Shelf with Configuration					
APP-124	1	Application Architecture	Security	Disconnect or log out a user session when it exceeds the allowable period of inactivity as established by the system administrator and configured in the system.	Off the Shelf with Configuration					
APP-125	2	Application Architecture	Security	Warn user that they will be disconnected before automatically logging user out of the system.	Off the Shelf with Configuration					
APP-126	1	Application Architecture	Security	Ensure security on report creation or distribution software so that a user cannot view/create a report containing data that they are not authorized to see within the system.	Off the Shelf with Configuration					
APP-127	1	Application Architecture	Audit Trail	Maintain an audit trail of all user actions that update and access the database including at a minimum user id, action performed, and time/date stamp; this includes any update via online, batch, web services or self-service functions.	Off the Shelf with Configuration					
APP-128	1	Application Architecture	Audit Trail	Provide a standardized audit trail format / row for each data structure (whether that's a table row or document depending on database type) in the system and track information including but not limited to: timestamp when the record was inserted, changed or deleted; user id or program id inserting, changing or deleting the record; copy of record before change/deletion; and copy of record after addition/change.	Off the Shelf with Configuration					
APP-129	1	Application Architecture	Audit Trail	Provide an audit trail for each interface program which shows: user or program initiating an interface, the date and time of interface execution and the interface completion status (Completed, Completed with Errors, Cancelled, Ended with Errors, etc.).	Off the Shelf with Configuration					
APP-130	2	Application Architecture	Archiving	Provide reporting and analysis tools which guide a system data administrator in determining which data is appropriate and safe to archive.	Off the Shelf with Configuration					
APP-131	2	Application Architecture	Archiving	Provide capability to store specific data elements for an indefinite period of time while other data may be able to be archived after user-defined periods based on record retention policies.	Off the Shelf with Configuration					
APP-132	2	Application Architecture	Archiving	Provide authorized user with ability to mark (and unmark) records for deletion but not removed database until archived.	Off the Shelf with Configuration					
APP-133	2	Application Architecture	Archiving	Provide capability to purge, archive, and restore inactive records based on user-defined criteria and tracking history.	Off the Shelf with Configuration					
APP-134	2	Application Architecture	Archiving	Allow system administrator to define archiving criteria for different types of data.	Off the Shelf with Configuration					
APP-135	2	Application Architecture	Archiving	Provide an automated archiving routine that archives data following the user-defined archiving rules; the process shall be able to be scheduled or manually initiated by an authorized user.	Off the Shelf with Configuration					
APP-136	2	Application Architecture	Archiving	Provide for restoration of archived data by various parameters including the date range of the archiving process and other user-defined business rules.	Off the Shelf with Configuration					

WVDOT Fleet Management and Equipment Management Requirements Matrix
Application Architecture Requirements

APP-137	2	Application Architecture	Archiving	Provide a flexible, automated archival routine to archive inactive reference data; this archival routine must validate that other table entries do not use the inactive data before archiving it and maintain overall system referential data integrity.	Off the Shelf with Configuration					
APP-138	1	Application Architecture	Help	Provided a centrally stored and maintained system wide help function.	Off the Shelf					
APP-139	1	Application Architecture	Help	Provide context-sensitive, field-level on-line help features for all screen elements, screen errors, and error codes.	Off the Shelf					
APP-140	2	Application Architecture	Help	Utilize an on-line help feature which directs the user either to a help screen specific to the field they are on if help is available for that field or to a help screen which is specific to the screen they are on if no field level help is available.	Off the Shelf					
APP-141	1	Application Architecture	Help	Provide table-driven error message handling.	Off the Shelf					
APP-142	1	Application Architecture	Help	Allow authorized users to modify and maintain error message text.	Does Not Meet					
APP-143	2	Application Architecture	Help	Ensure an error message points the user to the field in error (e.g., by identifying the field name, field number or providing a link to tab to the field).	Off the Shelf					
APP-144	2	Application Architecture	Help	Provide capability to identify processing or navigation path for a screen.	Off the Shelf					
APP-145	2	Application Architecture	Help	Allow customization of help files provided with the system by the application system administrator or other authorized users to incorporate WVDOT-wide or business unit/department specific information.	Off the Shelf with Configuration					
APP-146	2	Application Architecture	Help	Allow customization of help files by the system administrator or other authorized user by department/business unit or by roles and responsibilities within the proposed system: users must be able to modify the part of the help text that they are authorized to maintain without impacting other help text.	Off the Shelf with Configuration					
APP-147	2	Application Architecture	Help	Ensure all customized help text and files carry forward automatically during system updates and upgrades.	Off the Shelf					
APP-148	1	Application Architecture	User Documentation	Provide user documentation that is comprehensive, clear and easy to use (e.g., user documentation must provide quick answers to questions regarding the navigation of application screens, execution of pre-defined reports, and use of the ad-hoc query capability); it must also contain clear and thorough descriptions of all screen and batch processing functions, screen data, programs, system reports, and any processing parameters.	Off the Shelf					
APP-149	1	Application Architecture	User Documentation	Provide all system documentation and manuals electronically.	Off the Shelf					
APP-150	1	Application Architecture	User Documentation	Provide search functions for on-line documentation, across all documentation and within component pieces of the on-line documentation.	Does Not Meet					
APP-151	2	Application Architecture	User Documentation	Allow system administrator to authorize components of the system documentation to be available for download by authorized users.	Off the Shelf with Configuration					
APP-152	2	Application Architecture	User Documentation	Provide capability to allow authorized users to download user documentation approved by the system administrator for distribution as one or multiple PDF files.	Off the Shelf					
APP-153	2	Application Architecture	User Documentation	Enable users to incorporate user-defined documentation into system documentation (e.g., user procedures, business rules, etc.), which is accessible in the same manner as documentation from the software provider.	Off the Shelf with Configuration					
APP-154	2	Application Architecture	User Documentation	Support version control for user-defined documentation.	Off the Shelf with Configuration					
APP-155	1	Application Architecture	Upgradeability	Provide capability for all upgrade and patched processes for the system to automatically re-apply configurations and customizations made by WVDOT / Should these customizations/configurations have to manually be re-applied, the system shall identify these exceptions for manual re-application before applying any upgrade/patch software).	Off the Shelf					

WVDOT Fleet and Equipment Management Requirements Matrix
Technical Architecture Requirements

Req. #	Priority	Category	Sub-Category	Business (Functional) Requirement	Vendor Response	Customization Estimate, if Applicable	Capability Planned for Future Release	Core Module(s)	Third Party Solution(s)	Comments/Notes
TEC-001	1	Technical Architecture	General	Provide a solution architecture with expandable configurations and customizations, along with the capability to scale more or less for concurrent users and data storage as needed.	Off the Shelf				No	
TEC-002	1	Technical Architecture	General	Utilize a vendor-independent design that is based on non-proprietary technology and does not required the solution to be operated on proprietary hardware or operating system platforms.	Off the Shelf					
TEC-003	1	Technical Architecture	General	Implement a system design architected to allow system availability on a continuous basis, (i.e., 24x7). Support high-availability including during patches and updates. Provide a robust data recovery architecture design that minimizes system downtime.	Off the Shelf					
TEC-004	1	Technical Architecture	General	Utilize a service-oriented architecture (SOA) to facilitate seamless integration with heterogeneous internal and external systems.	Off the Shelf					
TEC-005	1	Technical Architecture	General	Provide the SOA capability which is platform and protocol independent and complies with Advancing Open Standards for the Information Society (OASIS) standards such as WS-Security, WS-Reliability, etc. and utilizing other open-standards (such as JSON, XML, OAuth and SAML).	Off the Shelf with Configuration					
TEC-006	2	Technical Architecture	General	Support virtualization for all tiers.	Off the Shelf					
TEC-007	1	Technical Architecture	General	Provide a browser-based interface.	Off the Shelf					
TEC-008	1	Technical Architecture	General	Deliver content via the current and most recent previous supported browser versions that include but are not limited to Microsoft Edge, Google Chrome, Mozilla Firefox and Safari.	Off the Shelf					
TEC-009	1	Technical Architecture	General	Ensure that content can be delivered via a web browser without requiring browser security settings to be lowered beyond typical industry standards in order for system functionality to perform properly.	Off the Shelf					
TEC-010	1	Technical Architecture	General	Deliver content via browser without Active X controls or plug-in support (such as Java Runtime Environment, Adobe Flash, etc.)	Off the Shelf					
TEC-011	1	Technical Architecture	General	Deliver content via web browser capability available on the IOS and Android.	Off the Shelf					
TEC-012	2	Technical Architecture	General	Ensure any additional required software required on a desktop can be deployed through industry standard Office Automation push technology.	Does Not Meet					
TEC-013	2	Technical Architecture	General	Support the following character sets: UTF-8 Unicode, UTF-16 Unicode, and ASCII.	Off the Shelf					
TEC-014	2	Technical Architecture	General	Utilize application stack at all points in terms of the operating system, network, database, desktop, and storage.	Off the Shelf					
TEC-015	2	Technical Architecture	General	Ensure Web and security server is 64 bit.	Off the Shelf					
TEC-016	2	Technical Architecture	Enterprise Application Integration	Support connectivity services through TCP/IP IPPB v4 IPPB v6.	Off the Shelf					
TEC-017	2	Technical Architecture	Enterprise Application Integration	Provide connectivity across and between WVDOT's network zones.	Off the Shelf					
TEC-018	2	Technical Architecture	Enterprise Application Integration	Provide communication services that guarantee message delivery and handles queuing and encryption for various types of communication (e.g., publish and subscribe, request/reply, etc.)	Off the Shelf with Configuration					
TEC-019	2	Technical Architecture	Enterprise Application Integration	Provide configurable data-transformation services to handle data validation, calculations, lookups, padding, scrambling, truncation, etc.	Off the Shelf					
TEC-020	2	Technical Architecture	Enterprise Application Integration	Provide ability to link software solution business process flows with business process flows in other state and WVDOT applications to support automating a business transaction which crosses application systems (for example, linking a workflow with an ERP workflow such as payments to outside entities).	Customization	Medium	Within 12 months	Within 12 months	Yes	
TEC-021	2	Technical Architecture	Data Integration	Provide capability for bulk data upload/imports from CSV or through API calls.	Off the Shelf with Configuration					
TEC-022	2	Technical Architecture	Data Integration	Support multiple data-transfer methods such as XML, JSON, CSV and flat files (e.g. ASCII, variable and/or fixed length, comma-delimited, etc.)	Off the Shelf with Configuration					
TEC-023	2	Technical Architecture	Data Integration	Provide capability of exposing business objects and processes as Web services through robust technical frameworks such as RESTful JSON microservices. Web services, APIs, etc., must maintain the same referential integrity as batch and on-line user transactions. This should include Application Programming Interfaces (API) and API programming documentation containing proper use (such as related RESTful commands) and valid parameters and parameter values that may be utilized, along with expected return data structure and example(s) (XML, JSON, etc...). As a substitute to the latter, in lieu of providing an API with documentation (or additionally), provide access directly to the database, tables, and columns with documentation of database table structure, table purpose, and associated ER diagrams.	Off the Shelf					
TEC-024	2	Technical Architecture	Data Integration	Support data encryption where appropriate based on user-defined business rules following Advanced Encryption Standards (AES) for data both in transit and at rest in all file structures.	Off the Shelf with Configuration					
TEC-025	2	Technical Architecture	Data Integration	Encrypt any data with personally identifiable information in transit and at rest in all file structures.	Off the Shelf					
TEC-026	2	Technical Architecture	Data Integration	Provide capability for data in the software solution to be extensible to authorized users from both an exposure and consumption standpoint.	Off the Shelf with Configuration					
TEC-027	2	Technical Architecture	Data Integration	Provide capability to execute interfaces with other systems on a pre-defined schedule or on the request of an authorized user.	Off the Shelf with Configuration					
TEC-028	2	Technical Architecture	Data Integration	Edit interfaced data by applying the same business rules that are defined for the equivalent transaction entered through the system.	Off the Shelf with Configuration					
TEC-029	2	Technical Architecture	Data Integration	Generate an error report for any validation issues or other errors identified during execution of a data load or an interface program.	Off the Shelf with Configuration					
TEC-030	2	Technical Architecture	Data Integration	Display validation errors on-line within a job history function or print in a report format at user option.	Off the Shelf with Configuration					
TEC-031	2	Technical Architecture	Data Integration	Place records not passing validation into a suspense file or table within the software solution.	Off the Shelf					
TEC-032	2	Technical Architecture	Data Integration	Allow correction of suspended records within the software solution.	Off the Shelf					
TEC-033	2	Technical Architecture	Data Integration	Provide capability to validate data during both the initial load step and during processing steps.	Off the Shelf with Configuration					
TEC-034	2	Technical Architecture	Data Integration	Allow the system administrator or other authorized users to browse the suspense file in the system.	Off the Shelf with Configuration					
TEC-035	2	Technical Architecture	Data Integration	Provide facilities for verification and batch controls tools to ensure the complete file was received and that the file was not a duplicate.	Off the Shelf					
TEC-036	2	Technical Architecture	ETL Tools	Provide data integration and data management tools with a range of extract, transform, and load (ETL) capabilities.	Off the Shelf with Configuration					
TEC-037	2	Technical Architecture	ETL Tools	Support ability to integrate third-party ETL tools to perform ETL functions.	Customization	Medium				
TEC-038	2	Technical Architecture	ETL Tools	Utilize scripting or other object-oriented structured languages to define advanced transformation routines/procedures.	Off the Shelf					

TEC-039	2	Technical Architecture	ETL Tools	Provide 'data exchange management' to schedule and monitor inbound and outbound files, notify appropriate contacts in the event of problems, automatically detect duplicate files, and perform other data interchange management functions.	Off the Shelf with Configuration					
TEC-040	2	Technical Architecture	ETL Tools	Validate and handle exceptions during transformation.	Off the Shelf with Configuration					
TEC-041	2	Technical Architecture	ETL Tools	Verify and maintain referential integrity as part of any transformation process.	Off the Shelf					
TEC-042	2	Technical Architecture	ETL Tools	Provide the capability to override the default source mapping and use specific SQL statements.	Does Not Meet					
TEC-043	2	Technical Architecture	ETL Tools	Provide ability to map data from multiple source systems and into multiple target source systems.	Customization	Medium				
TEC-044	2	Technical Architecture	ETL Tools	Provide ability to schedule and monitor the extraction, cleansing, transformation, and loading processes.	Off the Shelf with Configuration					
TEC-045	2	Technical Architecture	ETL Tools	Provide ability to rebuild/reload transactions from a specific date/time forward.	Off the Shelf with Configuration					
TEC-046	1	Technical Architecture	System Tools	Provide report design and generation tools within the system solution.	Off the Shelf					
TEC-047	1	Technical Architecture	System Tools	Provide end-user interface design tools within the system solution.	Off the Shelf				Yes	
TEC-048	2	Technical Architecture	System Tools	Provide tools for system monitoring within the system solution.	Off the Shelf with Configuration					
TEC-049	2	Technical Architecture	System Tools	Provide configuration management tools within the system solution.	Off the Shelf with Configuration					
TEC-050	2	Technical Architecture	System Tools	Provide source management tools within the system solution.	Does Not Meet					
TEC-051	2	Technical Architecture	System Tools	Provide ability to work with third-party configuration management and source management tools	Customization	Large				
TEC-052	2	Technical Architecture	System Tools	Provide tools for Application Program Interface (API) maintenance within the system solution.	Does Not Meet					There is a roadmap item to make open APIs available in 2022
TEC-053	1	Technical Architecture	Database	Maintain referential integrity of data through either database referential integrity declarations or application code.	Off the Shelf					
TEC-054	1	Technical Architecture	Database	Support data replication, load balancing and synchronization across multiple physical or virtual servers as appropriate.	Off the Shelf					
TEC-055	1	Technical Architecture	Database	Leverage DBMS database features and database and application design to reduce contention between updates by online users and those of concurrently running batch processes.	Off the Shelf					
TEC-056	1	Technical Architecture	Database	Ensure that on-line search queries will not be delayed by waiting for locks to be released.	Off the Shelf					
TEC-057	1	Technical Architecture	Database	Ensure in a two user scenario when both users retrieve data and attempt to update data one after another, to avoid loss of updates and/or to avoid overwriting of each other's data the system must notify the second user as the data is being updated by the first user (provide selection of "first in wins", last, etc.).	Off the Shelf					
TEC-058	1	Technical Architecture	Database	Ensure that in a two transaction read/update cycle, the user will always update ONLY what was being read, avoiding the so-called 'update collision' or 'deadly embrace'.	Off the Shelf					
TEC-059	1	Technical Architecture	Database	Support automatic "clean up" of partial database updates after suspended network sessions or after other failures.	Off the Shelf					
TEC-060	2	Technical Architecture	Database	Allow database structure changes to be made with a minimal impact to system availability.	Does Not Meet					
TEC-061	1	Technical Architecture	Database	Provide utilities which support automatic replication of table updates to multiple databases; provide replication of tables across application instances (test, training, dev, QA, prod, etc.).	Off the Shelf with Configuration					
TEC-062	1	Technical Architecture	Database	Support record-locking at the row level.	Does Not Meet					Not needed
TEC-063	1	Technical Architecture	Database	Support configuration of data attributes by the system administrator.	Off the Shelf with Configuration					
TEC-064	1	Technical Architecture	Database	Provide structured query language (SQL) capabilities for database queries.	Off the Shelf with Configuration					
TEC-065	1	Technical Architecture	Database	Include new data items automatically in migration paths during software upgrades.	Off the Shelf					
TEC-066	1	Technical Architecture	Reliability	Provide a solution which is architected to enable support for 99.99% availability of the production environment for online inquiry and updates seven days a week (other than for a defined maintenance window and other scheduled outages approved by WVDOT).	Off the Shelf					
TEC-067	1	Technical Architecture	Performance	Provide a solution which is architected to support up to 300 concurrent users across all system functions; respondent must be able to provide WVDOT with documented evidence of the ability of its proposed system solution to support these user volumes at the required performance levels as part of the evaluation and selection process.	Off the Shelf					
TEC-068	1	Technical Architecture	Performance	Provide a solution which is architected to fully process a transaction within the application and database environments within one second of receipt of the transaction 75% of the time and all transactions within five seconds for 300 concurrent users.	Off the Shelf					
TEC-069	1	Technical Architecture	Performance	Provide a solution which is architected to support best practice load-balancing techniques.	Off the Shelf					
TEC-070	1	Technical Architecture	Performance	Ensure that batch processing does not adversely impact on-line responsiveness or availability.	Off the Shelf					
TEC-071	1	Technical Architecture	Performance	Provide a solution architected to support implementation of application controlled parallel batch processing.	Off the Shelf with Configuration					
TEC-072	1	Technical Architecture	Performance	Provide support for user session isolation such that a failure in one session has no impact on other user sessions.	Off the Shelf					
TEC-073	1	Technical Architecture	Performance	Provide a solution architected to support access to data for pre-defined reports, ad-hoc queries, and business intelligence without impacting online transaction performance.	Off the Shelf					
TEC-074	2	Technical Architecture	Performance	Support utilization of industry leading third-party performance monitoring tools for real-time monitoring by administrators of response time, system use and capacity, concurrent users, and system errors.	Off the Shelf with Configuration					
TEC-075	2	Technical Architecture	Performance	Support utilization of industry leading third-party performance testing tools with proposed software solution to verify compliance with performance requirements.	Off the Shelf with Configuration					
TEC-076	1	Technical Architecture	Performance	Provide ability to integrate with DBMS tools which allow the database administrator or authorized user to tune the system for performance.	Off the Shelf with Configuration					
TEC-077	2	Technical Architecture	Performance	Provide for an automatic timeout for ad hoc queries (e.g., 30 minutes) configurable by the system administrator.	Off the Shelf with Configuration					
TEC-078	1	Technical Architecture	Business Continuity	Provide an architecture which supports fail-over to a parallel load-balanced environment on a real time basis.	Off the Shelf					
TEC-079	1	Technical Architecture	Business Continuity	Provide a system design architected to ensure that normal system operations are restored within four hours of a catastrophic disruption of a production system component 99% of the time.	Off the Shelf					
TEC-080	1	Technical Architecture	Business Continuity	Provide the capability to perform full backups, incremental backups, and recovery capabilities for data and application components. Back-ups shall not require maintenance windows; backups shall be able to function in the background of a production SQA or clustered environment and not impact system availability.	Off the Shelf					
TEC-081	1	Technical Architecture	Business Continuity	Provide a system design which supports the capability to provide disaster recovery at an off-site location.	Off the Shelf					
TEC-082	1	Technical Architecture	Business Continuity	Allow for maintenance of a current back-up of the system solution including application data and system tables and configurations to be utilized for restoration in the event of catastrophic failure and loss of data.	Off the Shelf with Configuration					

WVDOT Fleet and Equipment Management Requirements Matrix
Technical Architecture Requirements

TEC-083	1	Technical Architecture	Supportability	Construct using current but mature industry-standard application development tools, techniques and standards that can be maintained for the expected life of the system.	Off the Shelf					
TEC-084	1	Technical Architecture	Supportability	Allow at a minimum for configuration across multiple environments including production, patch, user acceptance test, system test, user training, development and sand box.	Off the Shelf					
TEC-085	1	Technical Architecture	Supportability	Provide production support for the last two major releases of the proposed software solution.	Off the Shelf					
TEC-086	1	Technical Architecture	Networking	Support execution of the proposed software solution over a TCP/IP network with a minimum speed of 10mb/sec.	Off the Shelf					
TEC-087	1	Technical Architecture	Networking	Identify access requirements through firewalls and follow standard port designations, where possible.	Off the Shelf					
TEC-088	1	Technical Architecture	Custom Development	Ensure any program code provided by the systems integrator or any of its software providers within the proposed system solution passes industry standard vulnerability checks prior to promotion into the WVDOT environment.	Off the Shelf					
TEC-089	2	Technical Architecture	Custom Development	Allow authorized technical staff to create new tables.	Does Not Meet					Although the customer owns its data, the AssetWorks schema is proprietary.
TEC-090	2	Technical Architecture	Custom Development	Allow authorized technical staff to create new fields.	Off the Shelf with Configuration					
TEC-091	2	Technical Architecture	Custom Development	Allow authorized technical staff to create new objects.	Off the Shelf with Configuration					
TEC-092	2	Technical Architecture	Custom Development	Allow authorized technical staff to change field structure.	Off the Shelf with Configuration					
TEC-093	2	Technical Architecture	Custom Development	Allow for identification/reporting of new user-defined tables.	Does Not Meet					
TEC-094	2	Technical Architecture	Custom Development	Allow for identification/reporting of new user-defined fields.	Off the Shelf with Configuration					
TEC-095	2	Technical Architecture	Custom Development	Allow for identification/reporting of new user-defined objects.	Off the Shelf with Configuration					
TEC-096	2	Technical Architecture	Custom Development	Support inclusion of any user-defined or developed objects (user-defined tables, fields, and other objects, etc.) in the upgrade path.	Off the Shelf with Configuration					
TEC-097	2	Technical Architecture	Job Scheduling and Processing	Provide a central enterprise job scheduler which can schedule jobs (across platforms and across multiple servers within a platform).	Off the Shelf with Configuration					
TEC-098	1	Technical Architecture	Job Scheduling and Processing	Integrate with a software scheduler to provide job scheduling functionality for the system solution.	Customization	Medium				
TEC-099	1	Technical Architecture	Job Scheduling and Processing	Provide capability to design/manage a batch job stream with multiple dependencies.	Off the Shelf with Configuration					
TEC-100	2	Technical Architecture	Job Scheduling and Processing	Provide capability to notify designated users via email or text based on job and job completion status. The user shall be able to tailor whether or not they see a notification based on statuses such as Completed, Completed with Errors, Incomplete, Failed, Not run. For example, a user may elect to not see any notifications for Completed jobs, just the exceptions like Errors, Incomplete, Failed, etc.	Off the Shelf with Configuration					
TEC-101	2	Technical Architecture	Job Scheduling and Processing	Provide capability to utilize job scheduling tools to automate administrative tasks such as database backups or regular report production.	Off the Shelf with Configuration					
TEC-102	2	Technical Architecture	Job Scheduling and Processing	Provide ability to establish job dependencies and control subsequent job execution based on user-defined condition codes.	Off the Shelf with Configuration					
TEC-103	2	Technical Architecture	Job Scheduling and Processing	Allow authorized users to control priority of the batch processes.	Off the Shelf with Configuration					
TEC-104	2	Technical Architecture	Job Scheduling and Processing	Allow authorized users to control job start times.	Off the Shelf with Configuration					
TEC-105	2	Technical Architecture	Job Scheduling and Processing	Provide an audit trail of job execution at a minimum noting the job's name, start time, end time, and status.	Off the Shelf with Configuration					
TEC-106	2	Technical Architecture	Job Scheduling and Processing	Allow authorized user to modify job status (e.g., changing status of a job to "Complete", etc.).	Off the Shelf with Configuration					
TEC-107	2	Technical Architecture	Job Scheduling and Processing	Provide capability to establish job groups.	Off the Shelf with Configuration					
TEC-108	2	Technical Architecture	Job Scheduling and Processing	Provide capability to re-start a multi-step job from a user-defined point/step.	Off the Shelf with Configuration					
TEC-109	2	Technical Architecture	Job Scheduling and Processing	Allow authorized users to control job by transaction type.	Off the Shelf with Configuration					
TEC-110	2	Technical Architecture	Job Scheduling and Processing	Produce a log of job results and append to this log if the job re-runs.	Off the Shelf with Configuration					
TEC-111	2	Technical Architecture	Job Scheduling and Processing	Provide the capability to establish and maintain user-defined calendars of scheduled jobs.	Off the Shelf					
TEC-112	2	Technical Architecture	Job Scheduling and Processing	Provide a suspense file for rejected batch transactions.	Off the Shelf					
TEC-113	2	Technical Architecture	Job Scheduling and Processing	Allow an authorized user to delete rejected records from the suspense file.	Off the Shelf					
TEC-114	2	Technical Architecture	Job Scheduling and Processing	Produce daily report of error transactions by system function.	Off the Shelf with Configuration					
TEC-115	2	Technical Architecture	Job Scheduling and Processing	Provide ability for an authorized user to edit a transaction in error and resubmit.	Off the Shelf					
TEC-116	1	Technical Architecture	Technical Documentation	Provide comprehensive technical system documentation and technical manuals for the solution system including any third-party add-on modules included in the proposed system solution. Documentation shall include comprehensive technical system documentation and technical manuals for the proposed system including any third-party add-on modules included in the proposed system solution.	Off the Shelf					
TEC-117	1	Technical Architecture	Technical Documentation	Include program descriptions in technical system documentation.	Off the Shelf					
TEC-118	1	Technical Architecture	Technical Documentation	Include screen definitions and descriptions in technical system documentation.	Off the Shelf					
TEC-119	1	Technical Architecture	Technical Documentation	Include database definitions, logical data model, and record layouts in technical system documentation.	Off the Shelf					
TEC-120	1	Technical Architecture	Technical Documentation	Include audit trail management documentation in technical system documentation.	Off the Shelf					
TEC-121	1	Technical Architecture	Technical Documentation	Include security administration documentation in technical system documentation.	Off the Shelf					
TEC-122	1	Technical Architecture	Technical Documentation	Include installation documentation in technical system documentation.	Off the Shelf					
TEC-123	1	Technical Architecture	Technical Documentation	Include performance tuning documentation in technical system documentation.	Off the Shelf					
TEC-124	1	Technical Architecture	Technical Documentation	Include workflow process and administration documentation in technical system documentation.	Off the Shelf					
TEC-125	1	Technical Architecture	Technical Documentation	Include disaster recovery procedures in technical system documentation.	Customization	Medium				For hosted customers, DR is handled according to the Data Center Overview included with this response. For on-premises customers, the AssetWorks solution requires no special considerations and should roll into your existing DRP.

AssetWORKS

AssetWorks Response to:

State of West Virginia
Request for Proposal #CRFP 0803
DOT2200000001
Fleet Management System
DUE DATE: 23 September 2021
COST PROPOSAL



ORIGINAL COST

POINT OF CONTACT:
John Crane, National Account Manager
998 Old Eagle School Road, Suite 1215 | Wayne, Pennsylvania 19087
Tel: 484.801.0317 | john.crane@assetworks.com

West Virginia Department of Transportation
CRFP No. DOT22*01

General Instructions

Vendor must indicate on the Cost Summary Sheet whether their proposal is a On-Premise or SaaS solution and complete either the On-Premise tab or the SaaS solution tab depending on its proposed deployment approach. Vendors proposing an On-Premise solution additionally need to provide additional data on the Cost Summary Sheet for columns identified as "D. Unit Price" and "E. Discount %" (not needed for SaaS solution), which are highlighted in light orange. Vendor should complete the deliverable pricing schedule. On the customizations tab, the Vendor should separately list out the cost of each customization identified in the Fleet a Equipment Management Requirements matrix. The total cost for customizations on this tab should tie out to the customization deliverable line on the deliverable: tab. On the Managed Services tab, the Vendor should include the cost of providing the required 12 months of production support and the cost of two optional one year production support periods. On the rate sheet, the Vendor should enter rates by classification which will be utilized as the basis for negotiating any required change orders during the contract period.

West Virginia Department of Transportation

RFP No. CRFP DOT22*01 - Cost-Price Proposal

Cost Summary

Select On-Premise or SaaS Solution, set one to "Y" and one to "N"		
If On-Premise solution, provide the additional fields D. Unit Price, E. Discount % (not needed for SaaS solution)		
On-Premise Solution?	N	Y = On-Premise Solution, Any other Value represents a SaaS Solution

AssetWorks

1. Software - Core Solution	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
SaaS - EAM Annual Fee for States	748	54151	1	$ 132,000.00	0%	$ 132,000.00
SaaS - CAM Annual Fee for States	220	511210	1	$ 30,000.00	0%	$ 30,000.00
						$ -
						$ -
						$ -
						$ -
					Software Subtotal	$ 162,000.00

2. Third Party Products	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
			0	$ -	0%	$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Third Party Subtotal	$ -

3. Services		Total Price
Implementation (from Implementation Tab)		$ 1,433,980.00
	Impl Services Subtotal	$ 1,433,980.00

PROPOSED 4. Ongoing Costs	A. Base-Implementation	B. Base-Post Production	C. Option Term	D. Total Price (A+B+C)
Annual SaaS Subscriptions	$ 162,000.00	$ 486,000.00	$ 348,705.00	$ 996,705.00
Annual Third Party SaaS Subscription	$ -	$ -	$ -	$ -
SaaS-Application Managed Services		$ -	$ -	$ -
			Ongoing Costs Subtotal	$ 996,705.00

Total Contract Price (Sum of Subtotals of Section 3 and 4 only)	$ 2,430,685.00

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Fleet Implementation Services

AssetWorks

1. Deliverables/Miletones	A. Total Price
Project Work Plan	$13,166.95
Project Kick-off Meeting	$30,333.91
Project Management Plan	$16,458.69
Quality Management Plan	$10,972.46
Knowledge Transfer Plan	$10,972.46
Stakeholder Engagement Plan	$10,972.46
Organizational Change Management Plan	$10,972.46
Master Test Plan	$16,458.69
Data Conversion Plan	$10,972.46
Interface Plan	$13,166.95
Training Plan	$6,583.48
Go-Live Deployment Plan	$10,972.46
Post Go-Live Plan	$10,972.46
System Detailed Design Document (SDDD)	$132,731.92
Security Plan	$10,972.46
Requirements Traceability Matrix	$56,862.30
Configured Software	$59,251.29
Unit Tested Interface Programs	$4,388.98
Unit Tested Conversion Programs	$4,388.98
Mock Data Conversion 1	$65,834.76
Mock Data Conversion 2	$70,223.75
Unit Tested Custom Objects (Forms, Reports, Workflows) - ***ties to Customizations Subtotal for Fleet***	$ 393,400.00
System Test Report	$6,583.48
Integration Test Report	$6,583.48
Security Test Report	$10,972.46
Performance Test Report	$10,972.46
User Acceptance Test Report	$28,528.40
Training Materials	$32,917.38
Training Course Pilot (pre User Acceptance Test)	$43,500.86
End-user Training	$23,750.43
Enterprise Readiness Plan	$13,166.95
OCM Support/Materials per approved plan	$32,917.38
Cut-over to Production	$43,306.37
Acceptance	$209,750.00
Fleet Services Subtotal	**$ 1,433,980.00**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Customization Cost - Complete By Phase for Each Item in Requirements Matrix Classifed as Customization or Third-Party Customization

AssetWorks

Customization Name/Description	Requirement #	Complexity	Price
Fleet Customizations			
CAM - Phase 1 - Assets, Analytics and Planning Deployment (3 travel trips)	RFP Section: 4.2.2.3.5	Large	$56,480.00
CAM - Phase 2 - Procurement & Disposal Deployment (2 travel trips)	RFP Section: 4.2.2.3.5	Large	$33,520.00
CAM - CAM Requisition to wvOASIS Advantage Financials Interface	RFP Section: 4.2.2.3.5	Large	$31,980.00
CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface	RFP Section: 4.2.2.3.5	Large	$29,930.00
CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface	RFP Section: 4.2.2.3.5	Large	$29,930.00
FA - Asset Create Interface - wvOASIS Advantage Financials to FA	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - Asset Create/Update Interface - FA to BRIM	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials	RFP Section: 4.2.2.3.5	Medium	$18,860.00
FA - Labor output from wvOASIS to FA for purpose of outputting Billing	RFP Section: 4.2.2.3.5	Medium	$17,220.00
FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA	RFP Section: 4.2.2.3.5	Medium	$15,990.00
FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface	RFP Section: 4.2.2.3.5	Large	$31,980.00
FA - Asset Create/Update Interface - FA to Fuel Master	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - External Fuel Interface - Fuel Master to FA	RFP Section: 4.2.2.3.5	Small	$9,020.00
FA - Asset Create/Update and Work History on Asset - DOA to FA	RFP Section: 4.2.2.3.5	Large	$26,240.00
FA - Billing Module Output Interface File - FA to DOA	RFP Section: 4.2.2.3.5	Medium	$18,040.00
FA - Accounts Interface - wvOASIS to FA	Optional; included based on technical diagram	Medium	$15,990.00
FA - Vendors Interface - wvOASIS to FA	Optional; included based on technical diagram	Small	$12,710.00
		Total Cost, Fleet Customizations	**$ 393,400.00**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
On-Premise
Annual Software Maintenance

AssetWorks

1. Annual Software Maintenance - Core Solution	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
EAM Standard License for States	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00
CAM Standard License for States	$ 140,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00
Software Maintenance: Implementation		$ 980,000.00	Software Maintenance: Post-Production Base Contract		$ 1,470,000.00

1. Annual Software Maintenance - Core Solution	Post Production Options		
	2026	2027	Total Price
EAM Standard License for States	$ 367,500.00	$ 385,875.00	$ 753,375.00
CAM Standard License for States	$ 147,000.00	$ 154,350.00	$ 301,350.00
Software Maintenance - Post Production Options			$ 1,054,725.00

1. Annual Software Maintenance - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Maintenance: Implementation		$ -	Software Maintenance: Post-Production Base Contract		$ -

1. Annual Software Maintenance - Third Party	Post Production Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Maintenance - Post Production Options			$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
SaaS Solution
Annual Software Subscriptions

AssetWorks

1. Annual Software Subscription	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
SaaS - EAM Monthly Fee $11,000.00 *Invoicing begins on de	$ -	$ 132,000.00	$ 132,000.00	$ 132,000.00	$ 132,000.00
SaaS - CAM Monthly Fee $2,500.00 based on number of asse	$ -	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00
Software Subscription - Implementation		**$ 162,000.00**	**Software Subscription - Post Production Base Contract**		**$ 486,000.00**

1. Annual Software Subscription	Post Production - Options		
	2026	2027	Total Price
SaaS - EAM Monthly Fee	$ 138,600.00	$ 145,530.00	$ 284,130.00
SaaS - CAM Monthly Fee based on number of assets (2,500-	$ 31,500.00	$ 33,075.00	$ 64,575.00
Software Subscription - Post Production Options			**$ 348,705.00**

1. Annual Software Subscription - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Subscription - Implementation		**$ -**	**Software Subscription - Post Production Base Contract**		**$ -**

1. Annual Software Subscription - Third-Party	Post Production - Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Subscription - Post Production Options			**$ -**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
All Solutions
Application Managed Services

AssetWorks

1. Application Managed Services	Base	Options Period	
	2023	2024	2025
	$ -	$ -	$ -
Application Managed Services-Base	$ -	Appl Managed Services-Options Period	$ -

Total Price - Managed Services	$ -

WVDOT Fleet System
CRFP No. DOT22*01
RATE SHEET

AssetWorks

Instructions: Vendors shall complete and submit this Rate Sheet. Vendors shall include billing rates for key staff that may provide professional services under this contract. Billing Rates shall be fully-burdened and include overhead, other direct costs and profit. These rates shall be used as a basis for the purchase of additional professional services under this Contract.

Item No.	Role	Role Description	Unit	Billing Rate
1	EAM Fleet Sr Project Manager	Serves as the primary contact with customer and works closely with other staff on a variety of tasks to	Hour	$205.00
2	EAM Fleet Software Sr Developer	Maintenance of the AssetWorks software product codes and extension of the product. Serves as a	Hour	$205.00
3	EAM Fleet Implementation Speciali	Working with customers on-site and remotely to provide software training to personnel involved with	Hour	$205.00
4	EAM Fleet Software Installation En	Supports the Project Manager in working with the customer during the installation of the AssetWorks	Hour	$205.00
5	EAM Fleet Software Documentatio	Prepare technical and complex documentation in support of the product or engagement under the	Hour	$205.00
6	EAM Fleet Software System Archite	Lead the overall design and development effort from a technical and functional perspective. Responsible	Hour	$205.00
7			Hour	$
8			Hour	$
9			Hour	$
10			Hour	$
11			Hour	$
12			Hour	$
13			Hour	$
14			Hour	$
15			Hour	$

PRICING EXPLANATION – CRFP 0803 DOT2200000001

AssetWorks is pleased to provide an explanation of pricing for the software and services to fully deploy the *AssetWorks EAM SaaS* solution. AssetWorks' method of licensing our EAM product allows us to provide our product to an *unlimited number of users*, an *unlimited number of CPUs or mobile units* on which the application can run, and an *unlimited number of assets* managed within the EAM system.

SAAS SUBSCRIPTION (SOFTWARE-AS-A-SERVICE)

Our SaaS Subscription model *includes all software licensing, maintenance, support, and hosting* for a fixed fee of $11,000.00 per month ($132,000.00 annually for year 1 and for each subsequent year thereafter). For complete cost and value transparency, we have outlined the AssetWorks EAM Core Bundle which consists of the EAM base license plus additional modules, portals and functionality recommended to complete the full EAM solution.

SaaS Subscription Fees			
Description	QTY	UNIT PRICE	ANNUAL TOTAL
EAM Core Bundle - SAAS YEAR 1	12	*$11,000.00*	*$132,000.00*
CAM Core Bundle - SAAS YEAR 1	12	*$2,500.00*	*$30,000.00*
EAM Standard Base License		Included	Included
Asset Management		Included	Included
Capital Planning		Included	Included
Asset Performance Assessment Tool		Included	Included
Capital Asset Management		Included	Included
Mapping Functionality		Included	Included
MobileFocus Enterprise Suite		Included	Included
Esri GIS Integration		Included	Included
Customer Access		Included	Included
MAXQueue Integration Engine		Included	Included
Work and Inventory Management (Shop Activity)		Included	Included
Motor Pool and Reservations			
KPI/Dashboards		Included	Included
Ad-Hoc Query Tool		Included	Included
Reporting Module powered by Crystal Reports		Included	Included
		Year 1 SaaS Fees	*$162,000.00*

PROFESSIONAL SERVICES FOR IMPLEMENTATION

Professional services work may be tailored to meet stringent turnkey requirements, or alternatively, services can be scaled back to allow the customer to be more involved in defining business requirements, managing the project, and providing training resources. AssetWorks suggest reviewing the SOW and implementation pricing in a pre-award discovery session. AssetWorks has provided a complete Statement of Work, Milestone Billing Schedule, and Project Plan for full breakdown and summary based on our understanding of the requirements for the RFP.

© 2020 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

WV DOT RFP (09.20.21)			
AssetWorks EAM/FleetFocus Implementation Milestones			
#	**WVDOT Pricing Sheet Deliverables**	**FleetFocus & CAM Milestone Names**	**Milestone Amount (USD)**
EAM-1	Project Work Plan	Deliver initial project work plan	$13,166.95
EAM-2	Project Kick-off Meeting	Conduct onsite kick-off meeting - 1 travel trip with two resources	$30,333.91
EAM-3	Project Management Plan	Deliver project management plan	$16,458.69
EAM-4	Quality Management Plan	Deliver quality management plan	$10,972.46
EAM-5	Knowledge Transfer Plan	Deliver knowledge transfer plan	$10,972.46
EAM-6	Stakeholder Engagement Plan	Deliver stakeholder engagement plan	$10,972.46
EAM-7	Organizational Change Management Plan	Deliver organizational change management plan	$10,972.46
EAM-8	Master Test Plan	Deliver master test plan	$16,458.69
EAM-9	Data Conversion Plan	Deliver data conversion plan	$10,972.46
EAM-10	Interface Plan	Deliver interface plan	$13,166.95
EAM-11	Training Plan	Deliver training plan	$6,583.48
EAM-12	Go-Live Deployment Plan	Deliver go-live deployment plan	$10,972.46
EAM-13	Post Go-Live Plan	Deliver post go-live plan	$10,972.46
N/A	System Detailed Design Document (SDDD)		N/A
EAM-14	System Detailed Design Document (SDDD)	Complete Business Process Design Workshops - 1 travel trip with one resource	$33,182.98
EAM-14.1	System Detailed Design Document (SDDD)	Deliver Conference Room Pilot - 1 travel trip with two resources	$33,182.98
EAM-14.2	System Detailed Design Document (SDDD)	Deliver Business Process Review TO BE Report	$33,182.98
EAM-14.3	System Detailed Design Document (SDDD)	Deliver system setup sessions	$33,182.98
EAM-15	Security Plan	Deliver security plan	$10,972.46
N/A	Requirements Traceability Matrix		N/A
EAM-16	Requirements Traceability Matrix	Deliver fit/gap and requirements - 1 travel trip with one resource	$28,431.15
EAM-16.1	Requirements Traceability Matrix	Deliver requirements traceability matrix	$28,431.15
EAM-17	Configured Software	Configure SOW Listed FleetFocus Modules per WBS A.4.1	$59,251.29

© 2020 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

EAM-18	Unit Tested Interface Programs	Deliver overview sessions on MAXQueue interface program and interface testing methodology	$4,388.98
EAM-19	Unit Tested Conversion Programs	Deliver overview and data conversion tools training and conversion methodology	$4,388.98
N/A	Mock Data Conversion 1		N/A
EAM-20	Mock Data Conversion 1	Mock Data Conversion 1 - Load Equipment, Parts & Summary Cost History in Test	$32,917.38
EAM-20.1	Mock Data Conversion 1	Mock Data Conversion 1 - Load 3 Years Historical Work Order Detail for Active Assets in Test	$35,111.87
N/A	Mock Data Conversion 2		N/A
EAM-21	Mock Data Conversion 2	Mock Data Conversion 2 - Load Equipment, Parts & Summary Cost History in Production	$32,917.38
EAM-21.1	Mock Data Conversion 2	Mock Data Conversion 2 - Load 3 Years Historical Work Order Detail for Active Assets in Production	$35,111.87
EAM 22	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 1 - Assets, Analytics and Planning Deployment (2 travel trips of one resource)	$56,480.00
EAM 23	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 2 - Procurement & Disposal Deployment (2 travel trips of one resource)	$33,520.00
EAM 24	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Specifications	$19,188.00
EAM 25	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Interface	$12,792.00
EAM 26	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Specifications	$17,958.00
EAM 27	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Interface	$11,972.00
EAM 28	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Specifications	$17,958.00

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

EAM 29	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Interface	$11,972.00
EAM 30	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Specifications	$9,102.00
EAM 31	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Interface	$6,068.00
EAM 32	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Specifications	$9,102.00
EAM 33	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Interface	$6,068.00
EAM 34	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Specifications	$11,316.00
EAM 35	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Interface	$7,544.00
EAM 36	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Specifications	$10,332.00
EAM 37	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Interface	$6,888.00
EAM 38	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Specifications	$9,594.00
EAM 39	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Interface	$6,396.00
EAM 40	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Specifications	$19,188.00
EAM 41	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Interface	$12,792.00
EAM 42	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Specifications	$9,102.00

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

EAM 43	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Interface	$6,068.00
EAM 44	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Specifications	$5,412.00
EAM 45	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Interface	$3,608.00
EAM 46	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Specifications	$15,744.00
EAM 47	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Interface	$10,496.00
EAM 48	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Specifications	$10,824.00
EAM 49	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Interface	$7,216.00
EAM 50	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$9,594.00
EAM 51	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$6,396.00
EAM 52	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$7,626.00
EAM 53	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$5,084.00
EAM 54	System Test Report	Deliver system test report	$6,583.48
EAM 55	Integration Test Report	Deliver integration test report	$6,583.48
EAM 56	Security Test Report	Deliver security test report	$10,972.46
EAM 57	Performance Test Report	Deliver performance test report	$10,972.46
EAM 58	User Acceptance Test Report	Deliver user acceptance test report	$28,528.40
EAM 59	Training Materials	Deliver training materials	$32,917.38
EAM 60	Training Course Pilot (pre User Acceptance Test)	Deliver pre-training and assist customer in user acceptance testing for ten days - 1 travel trip with two resources	$43,500.86
EAM 61	End-user Training	Deliver train-the-trainer training - 2 travel trips with one resource	$23,750.43
EAM 62	Enterprise Readiness Plan	Deliver enterprise readiness plan	$13,166.95
EAM 63	OCM Support/Materials per approved plan	Deliver OCM materials	$32,917.38

© 2020 AssetWorks LLC | All Rights Reserved. | www.assetworks.com

EAM 64	Cut-over to Production	Assist customer in deployment of go live checklist and assist onsite for 3 weeks - 3 travel trips with one resource	$43,306.37
EAM 65	Acceptance	26 weeks onsite at maximum of 3 days per week; includes 2 trips for PM; travel included at $56,000.	$209,750.00
		Total Professional Services Costs (Inclusive of 13 - FleetFocus, 4 - CAM & 28 - post implementation travel trips)	$1,433,980

PRICING SUMMARY

SaaS Subscription Year 1:

Total Cost Summary – Year 1	
Description	ANNUAL TOTAL
Year 1 SaaS Fees + SaaS Setup Fee	$162,000.00
Professional Services Total for Deployment	$1,433,980.00
Cost Summary - Year 1	$1,595,980.00

© 2020 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com

Exhibit E

AssetWORKS

ASSETWORKS MASTER AGREEMENT

The AssetWorks Online Master is between the entity ("Customer") stated on the Order Form ("Order Form"), and AssetWorks LLC ("AssetWorks"). It consists of the terms and conditions listed below, as well as the details on the Order Form (together, the "Agreement"). It is effective on the date the Order Form is signed by both parties ("Effective Date").

The Order Form is subject to the following terms and conditions unless Customer has a separate written and signed agreement with AssetWorks. Your right to use the products and Services is conditioned upon acceptance of this Agreement.

These terms shall apply to the software products (Software), Hardware products (Hardware) and Professional Services (Services) on the Order Form as applicable:

- Attachment 1 Software License Terms
- Attachment 2 Software Maintenance Terms
- Attachment 3 Professional Services Terms
- Attachment 4 Hosting Terms
- Attachment 5 Hardware Terms

1. **FEES AND PAYMENT.** For recurring Services, unless otherwise stated in the Order Form, AssetWorks shall invoice Customer in advance. All invoiced fees shall be due and payable within 30 days of the date of an invoice. For Professional Services, invoices shall be sent either monthly or upon completion of milestones (as defined in the Statement of Work or on the Order Form) and include charges defined in the Order Form unless otherwise specifically stated in the Order Form. All payments shall be made in United States Dollars without deduction for any taxes or withholding or other offset.

Any undisputed amounts not paid when due will be subject to interest accrued, which interest will be immediately due and payable from the due date for payment until the date of actual receipt of the amount in cleared funds by AssetWorks, at the lesser of (a) 1.5% per month, or (b) the highest rate under applicable law.

Customer will be considered delinquent if payment in full is not received 45 days from the date of the invoice. AssetWorks reserves the right to suspend or terminate this Agreement and Customer access to the Service if the Customer account becomes delinquent and is not cured within 10 days of notice of non-payment. Customer will continue to be charged and hereby agrees to pay for Service during any period of suspension. Customer's failure to pay any invoice after this 10 day period shall constitute a material default hereunder and shall entitle AssetWorks to exercise any and all rights and remedies provided herein or at law including a suspension of Services under the Agreement. If Customer or AssetWorks initiate termination under any provision of the Agreement other than under the Termination for Default Section, Customer will be obligated to pay the balance due for the remainder of the term for its account computed in accordance with the Order Form. Customer agrees that it shall be billed for such unpaid fees. In the event of a dispute between the parties that does not result in a termination of the Agreement, Customer agrees to make all payments due under the Agreement pending the resolution of the dispute.

2. **TAXES.** Except as otherwise specified the prices stated do not include any state, federal, or local sales, use or excise taxes, duties, or brokerage fees now in force or which may be enacted in the future, and may be applicable to the sale, delivery, or use of products and Services supplied by AssetWorks. Unless the Customer provides a valid tax exemption certificate and in the event Customer's tax exemption status changes, Customer expressly agrees to pay to AssetWorks, in addition to the prices stated, the amount of any such taxes which may be imposed upon or payable by AssetWorks.

In no event whatsoever shall AssetWorks be liable for sales, use, business, gross receipts or any other tax that may be levied by any State or Federal Government entity against a contractor to such governmental entity other than taxes upon income earned by AssetWorks for the goods and/or Services provided pursuant this Agreement. This exclusion of tax liability is also applicable to any goods and/or Services that may be provided by AssetWorks under any later Order Form or amendment hereto regardless of changes in legislation or policy.

In the event a taxing authority conducts an audit of this Agreement and determines that an additional tax should have been imposed on the Services or Deliverables provided by AssetWorks to Customer (other than those taxes levied on AssetWorks income), Customer shall reimburse AssetWorks for any such additional tax, including interest and penalties thereon. Similarly, if a taxing authority determines that a refund of tax is due as it relates to the Services or Deliverables provided by AssetWorks to Customer (except those taxes relating to AssetWorks income), AssetWorks shall reimburse Customer such refund, including any interest paid thereon by the taxing authority.

3. **TERM.** The Term of the Agreement shall commence as of the Effective Date and shall continue for 5 years ("Initial Term") unless terminated earlier as set forth below. At the end of the Initial Term, the Agreement shall automatically renew for successive 1-year terms unless or until either party provides the other party with written notice of non-renewal at least 90 days prior to the end of the then current term.

4. **TERMINATION FOR DEFAULT.** A Default shall occur if: (1) a party fails to perform any of its material obligations under the Agreement and such failure remains uncured for 30 days after receipt of written notice thereof, except for non-payment as provided in Section 1; or (2) an error that prevents use of the Software in a material aspect due to an integration with third party software and such failure remains uncured for 60 days after receipt of written notice thereof; or (3) a party ceases to conduct business, becomes or is declared insolvent or bankrupt, is the subject of any proceeding relating to its liquidation or insolvency which is not dismissed within 90 days or makes an assignment for the benefit of creditors.

If Default occurs, the non-defaulting party, in addition to any other rights available to it under law or equity, may withhold its performance hereunder or may terminate the Agreement by written notice to the defaulting party. Unless otherwise provided in the Agreement, remedies shall be cumulative and there shall be no obligation to exercise a particular remedy.

If Customer terminates this Agreement other than pursuant to this Section, a Service Termination Fee equal to 100% of the current Maintenance and Hosting fees times the number of remaining years in the Term of this Agreement.

5. **INTELLECTUAL PROPERTY.** Customer and AssetWorks shall each retain ownership of, and all right, title and interest in and to, their respective pre-existing Intellectual Property. The Services performed, code developed and any Intellectual Property produced pursuant to this Agreement ("Developments") are not "works for hire," or any similar concept throughout the world, and AssetWorks is the sole owner of all right, title and interest in such Developments. If for any reason any Developments may be considered "works made for hire" and/ or there are any rights in the Developments that accrue to the Customer, then the Customer hereby irrevocably assigns and agrees to assign any and all of rights, title and interest thereto, whether now known or hereafter defined or discovered, to AssetWorks and the Customer agrees to take such further action, including executing such instruments and documents as AssetWorks may reasonably request, to evidence such assignment. As used herein, "Intellectual Property" shall mean inventions (whether or not patentable), works of authorship, trade secrets, copyright, techniques, know-how, ideas, concepts, algorithms, and other intellectual property incorporated into any Statement of Work or Deliverable whether or not first created, discovered, or developed by AssetWorks in providing the Services.

6. **CONFIDENTIAL INFORMATION.** "Confidential Information" means all information disclosed by either party to the other party, whether orally or in writing, that the other party should reasonably understand to be confidential. Each party will maintain all Confidential Information in confidence and will use it solely in the discharge of its obligations under this Agreement and any applicable Statement of Work. Nothing herein will be deemed to restrict a party from disclosing Confidential Information to its employees and subcontractors in the discharge of such obligations.

Confidential Information will not include information that (i) is, or becomes, generally known or available through no fault of the, recipient; (ii) is known to the recipient at the time of its receipt from the disclosing party; (iii) the disclosing party provides to a third party without restrictions on disclosure; (iv) is subsequently and rightfully provided to the recipient by a third party without restriction on disclosure; (v) is independently developed by the recipient, without reference to the disclosing party's Confidential Information; or (vi) is required to be disclosed pursuant to a governmental agency or court subpoena, provided the recipient promptly notifies the disclosing party of such subpoena to allow it reasonable time to seek a protective order or other appropriate relief.

Because of the unique nature of the Confidential Information, each party agrees that the disclosing party may suffer irreparable harm in the event the recipient fails to comply with its obligations under this Section, and that monetary damages may be inadequate to compensate the disclosing party for such breach. Accordingly, the recipient agrees that the disclosing party may, in addition to any other remedies available to it, be entitled to injunctive relief.

7. **NONSOLICITATION.** During the term of this Agreement, and for 1 year thereafter, Customer shall not solicit the employment of, or contract for the Services of, any person who is/was an employee, agent, or subcontractor of AssetWorks during the term of this Agreement. Nothing in this section shall prohibit Customer from placing a bona fide public advertisement for employment which is not specifically targeted at AssetWorks employees and Customer shall not be restricted from hiring any such person who responds to any such general solicitation or public advertisement so long as no direct solicitation of such person has occurred.

8. **GOVERNING LAW; VENUE.** The Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without regard to choice of law principles. The sole jurisdiction and venue for actions related to the subject matter hereof shall be the state and Federal courts in the Commonwealth of Pennsylvania. Both parties consent to the jurisdiction of such courts and waive any objections regarding venue in such courts.

9. **ASSIGNMENT.** Neither the Agreement, in whole or in part, nor any duties or obligations hereunder shall be assigned or transferred by Customer without the prior written approval of AssetWorks, which approval may be withheld in the reasonable judgment of AssetWorks. Customer agrees that AssetWorks may assign its obligations to a third party subject to Customer's written approval of such change, but AssetWorks shall remain responsible for performance under the Agreement. All fees will remain intact as outlined in the Order Form. Notwithstanding the above restrictions, in the event of an assignment or novation of this Agreement to an AssetWorks affiliate pursuant to an internal corporate reorganization, AssetWorks shall not require Customer's prior written consent.

10. **SEVERABILITY.** If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any manner.

11. **ENTIRE AGREEMENT.** The Agreement and any schedules and exhibits thereto contain the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes and replaces any and all prior or contemporaneous proposals, discussions, agreements, understandings, commitments, representations of any kind, whether oral or written, relating to the subject matter hereof or the Services to be provided hereunder. It is understood that terms and conditions, if any, included in Customer's purchase order or similar document are for Customer's internal purposes only and any provisions contained therein shall have no effect whatsoever upon this Agreement.

12. **FORCE MAJEURE.** Neither party shall be liable for any failure of or delay in performance of its obligations (except for payment obligations) under this Agreement to the extent such failure or delay is due to acts of God, acts of a public enemy, fires, floods, power outages, wars, civil disturbances, sabotage, terrorism, accidents, insurrections, blockades, embargoes, storms, explosions, labor disputes (whether or not the employees' demands are reasonable and/or within the party's power to satisfy), failure of common carriers, Internet Service Providers, or other communication devices, acts of cyber criminals, terrorists or other criminals, acts of any governmental body (whether civil or military, foreign or domestic), failure or delay of third parties or governmental bodies from whom a party is obtaining or must obtain approvals, authorizations, licenses, franchises or permits, inability to obtain labor, materials, power, equipment, or transportation, or other circumstances beyond its reasonable control (collectively referred to herein as "Force Majeure Occurrences"), however, nothing in this section shall relieve Customer of the obligation to make payments for any products or Services provided by AssetWorks. Any delays caused by a Force Majeure Occurrence shall not be a breach of or failure to perform this Agreement or any part thereof and the date on which the obligations hereunder are due to be fulfilled shall be extended for a period equal to the time lost as a result of such delays. Neither party shall be liable to the other for any liability claims, damages or other loss caused by or resulting from a Force Majeure Occurrence.

13. **LIMITATION OF LIABILITY.** Customer agrees that AssetWorks' total liability to Customer for any and all damages whatsoever arising out of or in any way related to this Agreement or any amendment to this Agreement, from any cause, including but

not limited to negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not, in the aggregate, exceed the amount of fees paid to AssetWorks in the 12 months preceding the date on which the claim arose.

In no event shall AssetWorks be liable for (a) special, indirect, incidental, economic, consequential or punitive damages, including but not limited to lost revenue, lost profits, replacement goods, loss of technology rights or Services, loss or corruption of data, or interruption or loss of use of Software or any portion thereof or (b) any damages (regardless of their nature) for any delay or failure by AssetWorks to perform its obligations under this agreement due to any cause beyond its reasonable control, regardless of the legal theory under which such damages are sought even if AssetWorks has been advised of the likelihood of such damages, and notwithstanding any failure of essential purpose of any limited remedy.

AssetWorks will not be liable to Customer or any third party for any claims, expenses, damages, costs or losses whatsoever arising out of or in any way related to Customer's use of the Software insofar as such Software may be used to store, transmit, display, disclose or otherwise use data or information which is considered private, confidential, proprietary or otherwise exempt from public disclosure under applicable law.

AssetWorks does not guarantee the privacy, security, authenticity or non-corruption of any information transmitted through the internet or any mobile or wireless network, or any information stored in any system connected to the internet or to any mobile or wireless network. AssetWorks shall not be responsible for any claims, damages, costs or losses whatsoever arising out of or in any way related to Customer's connection to or use of the internet or of any mobile or wireless network.

14. **WAIVER.** No provision of the Agreement may be waived unless in writing, signed by both of the parties hereto. Waiver of default of any provision of the Agreement shall not operate or be construed as a waiver of any subsequent default of such provision, nor shall a waiver of any one provision of the Agreement be deemed to be a waiver of any other provision.

15. **AMENDMENTS, SUPPLEMENTS.** The Agreement may be amended or supplemented only in a writing signed by the parties' authorized representative(s).

16. **BINDING EFFECT, BENEFITS.** The Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns. Notwithstanding anything contained in the Agreement to the contrary, nothing in the Agreement, expressed or implied, is intended to confer on any person other than the parties hereto or their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of the Agreement.

17. **HEADINGS.** The Section headings in the Agreement are inserted only as a matter of convenience, and in no way define, limit, or extend or interpret the scope of the Agreement or of any particular Section.

18. **AUTHORIZATION.** Each of the parties represents and warrants that the Agreement is a valid and binding obligation enforceable against it and that the representative executing the Agreement is duly authorized and empowered to sign the Agreement.

19. **RELATIONSHIP OF PARTIES.** The relationship of the parties shall at all times be one of independent contractors. Nothing contained herein shall be construed as creating any agency, partnership or other form of joint enterprise between the parties.

20. **CONFLICTING PROVISIONS.** This Agreement and all of the exhibits, schedules, and documents attached hereto are intended to be read and construed in harmony with each other, but in the event any provision in any Attachment conflicts with any provision of this Agreement, then this Agreement shall be deemed to control, and such conflicting provision to the extent it conflicts shall be deemed removed and replaced with the governing provision herein. Any terms in a Customer purchase order are deemed to be for Customer's own use and are specifically rejected by the Terms of this Agreement.

21. **COUNTERPARTS.** The Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

22. **SURVIVAL.** All provisions of this Agreement, which by their nature should survive termination of this Agreement, will so survive for the applicable statute of limitations period.

23. **NOTICE.** Any communication or notice hereunder must be in writing, and will be deemed given and effective: (i) when delivered personally with proof of receipt; (ii) when sent by e-mail; (iii) when delivered by overnight express; or (iv) 3 days after the postmark date when mailed by certified or registered mail, postage prepaid, return receipt requested and addressed to a party at its address for notices. Each party's address for notices is stated on the Order Form. Such address may be changed by a notice delivered to the other party in accordance with the provisions of this Section.

24. **DISPUTES.** In the event of any dispute arising in the performance of this Agreement, AssetWorks and the Customer will seek to resolve such dispute through good faith, amicable discussions and negotiations. In any action at law or in equity to enforce or interpret the terms of this Agreement, the prevailing party will be entitled to recover its reasonable attorneys' fees and costs, in addition to any other relief ordered by the court. Such fees and costs will include those incurred in connection with the enforcement of any resulting judgment or order, and any post judgment order will provide for the right to receive such attorneys' fees and costs.

25. **COUNSEL.** By acceptance of this Agreement, each of the Parties acknowledges and agrees that it has had an opportunity to consult with legal counsel and that it knowingly and voluntarily waives any right to a trial by jury of any dispute pertaining to or relating in any way to the transactions contemplated by the Agreement, the provisions of any federal, state or local law, regulation or ordinance notwithstanding.

Attachment 1 – Software License Terms

1. **SOFTWARE LICENSE**

A. Subject to the terms and conditions set forth in this Agreement, AssetWorks grants to Customer a limited, non-exclusive, perpetual (subject to the Termination section of this Attachment below) non-transferable, non-sublicensable license to the AssetWorks software

(Software) for the number of units specified in the purchase order (Order Form). The AssetWorks Software is licensed under different license categories. The license to the software granted to Customer shall be specified on the Order Form and is described below. Except as provided above, use of Software in excess of limits defined in the Order Form requires additional licensing fees. Customer's license is to use the Software in its own business; Customer has no right to use the Software in processing work for third parties.

i. "Concurrent License" – means a license for an authorized user of the Software/Services, provided that the number of simultaneous users may not exceed the number of licenses purchased. Each simultaneous login to the Software (through active browser sessions) shall be deemed to constitute one Concurrent License.

ii. "Active Equipment Unit License" – means a license per asset that Customer has purchased. Customer must purchase a license for each Active Equipment Unit to be covered by the Software. Active Equipment Units are vehicles or assets that are active in the customer's fleet in that work is performed or activity about the asset is reported on a recurring basis. Sold, retired or permanently inactive units do not count as Active Equipment Units and the historical information of these assets can reside in the database.

iii. "Enterprise License" – The Enterprise License is a license for the Software that allows for an unlimited number of users and tracks an unlimited amount of assets. Pricing is based on the population of the city, town, region, fleet, college, university, department, etc. (Population Base) the Customer utilizes the Enterprise License to cover. Customer must promptly purchase an Enterprise License reconciliation if Customer's Population Base increases beyond the Customer's licensed limits for any reason, including, but not limited to a material increase in Population Base, use of the Software to provide Services to an additional population or merger of the Customer with any other entity that increases the population served by the Software.

B. For Customer hosted instances of the Software, Customer shall have the right to use only one copy or image of the Software for production purposes and shall not copy or use the Software for any other purpose except (i) for archival purposes, (ii) in connection with a disaster recovery program, and (iii) for the purpose of testing the operation of the Software, provided such testing copy shall not be used in a live production environment. AssetWorks Hosted Software is subject to the Hosting Terms Attachment.

C. Software may be licensed on a per-seat basis, a number of Active Equipment Unit basis, or other basis as described on the Order Form ("License Restriction"). Customer may increase the License Restriction at any time by executing a subsequent Order Form and paying in full the applicable fees. "Active Equipment Unit" shall mean any in service unit to which work orders, fuel tickets, or usage tickets are posted, but shall not include retired equipment.

D. If any third party Software is provided to Customer pursuant to this Agreement, such license shall be in accordance with terms set forth in the Order Form.

E. "Source Code" shall mean Software in human-readable form, including all appropriate programmer's comments, data files and structures, header and include files, macros, make files, object libraries, programming tools not commercially available, technical specifications, flowcharts and logic diagrams, schematics, annotations and documentation reasonably required or necessary to enable a competent independent third party programmer to create, operate, maintain, modify and improve such Software without the help of any other person, and with data files containing Source Code in standard ASCII format readable by a text editor.

F. Except as expressly authorized under this Agreement, Customer shall not (i) sell, rent, lease, timeshare, encumber, license, sublicense, transfer or assign the Software or Documentation; (ii) attempt to decompile, disassemble or reverse engineer the Software in whole or in part, or otherwise attempt to derive the Source Code of the Software.

Except for the license specifically granted by this Agreement, AssetWorks retains all right, title and interest in the Software (including object-code and source code formats), the documentation and all related materials and all intellectual property rights worldwide to the Software and the Documentation. Customer received no other license, express or implied, than what is expressly set forth in this Section.

2. **NON-DISCLOSURE**

A. Subject to the other paragraphs in this Section, Customer agrees that the Software shall be held in confidence by Customer and shall not be disclosed to others without the prior written consent of AssetWorks, which may be withheld by AssetWorks in its sole discretion. This obligation to hold confidential does not apply to any portion of the Software (1) developed by Customer and in Customer's possession prior to the receipt of same from AssetWorks; (2) which at the time of disclosure is part of the public domain through no act or failure to act by Customer; or (3) which is lawfully disclosed to Customer without restriction on further disclosure by another party who did not acquire same from AssetWorks.

B. AssetWorks provides documentation for the Software electronically. The Customer may copy, in whole or in part, any such documentation relative to the Software for Customer's internal use consistent with this Agreement.

C. Customer's records with regard to use of the Software shall be made available to AssetWorks at all reasonable times at AssetWorks' request to audit Customer's compliance with this Agreement, and Customer shall certify to the truth and accuracy of such records.

3. **LIMITED WARRANTIES**

A. Software Warranty. AssetWorks represents that it has the right to license the Software to Customer as provided in the Software License Section. AssetWorks further represents that the Software will conform to the description contained in the documentation provided or published by AssetWorks ("Documentation") In the event the Software fails to conform to the description contained in the Documentation, AssetWorks' sole obligation shall be to correct the errors as detailed in this Section. This limited warranty is in lieu of all liabilities or obligations of AssetWorks for damages arising out of or in connection with the delivery, use or performance of the Software. This warranty extends for a period of 90 days following the date the Software is made available to Customer, but in no event later than 1 year from the date of execution of this Agreement.

A. Intellectual Property Indemnity. AssetWorks will defend, at its own expense, any action brought against Customer to the extent that it is based on a claim that the Software supplied by AssetWorks infringes a Worldwide patent or copyright, and AssetWorks will pay those costs and damages finally awarded against Customer in any such action that are attributable to any such claim; provided, such defense and payments are conditioned on the following: (1) that AssetWorks shall be promptly notified in writing by Customer following its receipt of any such claim; (2) that AssetWorks shall have sole control of the defense of any action on such claim and all negotiations for its settlement or compromise; (3) should the Software become, or in AssetWorks' opinion is likely to become, the subject of a claim of infringement of a Worldwide patent or copyright, then Customer shall permit AssetWorks, at its option and expense, either to (A) procure for Customer a non-infringing license to use the Software; (B) modify the Software so that it becomes non-infringing; (C) procure for Customer a depreciated credit for the Software and accept its return. Depreciation shall be an equal amount per year over the lifetime of

the Software, which the parties agree shall be 5 years. AssetWorks shall have no liability to Customer under any provision of this clause with respect to any claim of patent or copyright infringement that is based on Customer's unauthorized use or combination of the Software with Software or data not supplied by AssetWorks as part of the Software. AssetWorks' indemnification obligation under this section shall not exceed one million dollars in the aggregate.

B. Unless prohibited by applicable law, Customer agrees to indemnify and defend AssetWorks against any claims made by any third party against AssetWorks arising out of Customer's use of the Software unless such claims are due to the negligence or willful misconduct of AssetWorks.

C. During the warranty period, in the event that the Customer encounters an error and/or malfunction whereby the Software does not conform to the description in the Documentation, AssetWorks sole responsibility under this Limited Warranty is as follows:

i. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer, there exists an error or nonconformance to the Documentation, AssetWorks will take such steps as are reasonably required to correct the error with due dispatch.

ii. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer, the error or nonconformance to the Documentation does not constitute a serious impediment to the normal intended use of the Software, AssetWorks will correct the error and distribute the correction to the Customer in accordance with AssetWorks' normal Software revision schedule.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER RIGHTS, CONDITIONS AND WARRANTIES. ASSETWORKS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE SOFTWARE, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. ASSETWORKS DOES NOT WARRANT THAT ANY PRODUCTS WILL BE ERROR-FREE, OR THAT ANY DEFECTS THAT MAY EXIST IN ITS PRODUCTS CAN BE CORRECTED. IN NO EVENT SHALL ASSETWORKS BE LIABLE UNDER THIS WARRANTY FOR COST OF PROCUREMENT OF SUBSTITUTE GOODS, LOST PROFITS OR ANY OTHER SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING BUT NOT LIMITED TO LOST DATA), HOWEVER CAUSED WHETHER OR NOT ASSETWORKS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

4. **TERMINATION**

A. The license conveyed pursuant to this Attachment may be terminated by AssetWorks in the event of breach or default by Customer under this Agreement provided AssetWorks notifies Customer in writing of the breach or default and Customer does not correct same within 30 days of AssetWorks' written notice.

B. In addition, Customer shall have the right to terminate the Software License at any time; provided such termination shall not relieve Customer of its obligations to pay any remaining unpaid balance.

C. All Software and Documentation shall be and will remain the property of AssetWorks. Upon termination of this Agreement, whatever the reason, such Software and Documentation and any copies thereof made by Customer pursuant to the Non-Disclosure Section of this Attachment above shall be promptly returned to AssetWorks.

Attachment 2 – Software Maintenance Terms

1. **Term.** Maintenance shall commence immediately upon the Effective Date and shall have a term of 12 months. The term shall automatically renew each year thereafter for an additional 12 month period unless terminated as set forth below.

2. **Correction of Deviations.** In the event that the Customer encounters an error and/or malfunction ("Deviation") in the Software, it shall communicate the circumstances and any supporting information to AssetWorks. Upon receipt, AssetWorks will respond as follows:

a. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer, there exists a Deviation that does not constitute a serious impediment to the normal intended use of the Software, AssetWorks will correct the Deviation and distribute the correction to the Customer in accordance with AssetWorks' normal Software revision schedule.

b. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer there exists a Deviation that does constitute a serious impediment to the normal, intended use of the Software, AssetWorks will take such steps as are reasonably required to correct the Deviation.

3. **Software Revisions and New Versions**

a. The Software may be revised by AssetWorks as a result of the correction of Deviations and/or the release of upgrades or improvements or modifications designed to improve the performance of the Software and/or to increase the capabilities of the Software (hereafter "Revisions"). Revisions shall be of two kinds:

i. Revisions that the Customer is obliged to implement ("Mandatory Revisions");

ii. Revisions that may be implemented by the Customer at its option ("Optional Revisions").

No charge shall be made to the Customer for either Mandatory Revisions or Optional Revisions while under a current Maintenance Agreement.

b. New products ("New Products") may be added to the Software by AssetWorks from time to time. Compared to a Revision, New Products substantially improve the performance of the Software and/or substantially increase its functionality and capability. AssetWorks, in its sole discretion, shall decide which upgrades and improvements will be issued as Revisions without charge and which shall be issued as New Products for which there may be a charge.

4. **Telephone Hotline Assistance.** AssetWorks, at its expense, shall make available technically qualified personnel to respond to all reasonable telephone requests, Monday through Friday, excluding State holidays, during normal business hours, that may be made by the Customer relating to the application and operation of the Software. At other times such personnel are available by pager for emergencies.

5. **Technical Literature**. AssetWorks shall make available to the Customer all technical literature in electronic format that is considered by AssetWorks to be relevant to the Software and its use within the scope of Customer's operations.

6. **Proper Use**

a. Customer shall not modify the Software or Source Code as defined in the Software License Terms Attachment unless specifically authorized by AssetWorks in writing.

b. The Customer agrees that all reasonable effort shall be taken to ensure that neither the Software nor data files are misused or modified without the express written permission of AssetWorks.

c. In the event that the Customer or its agents misuses or modifies the Software or data files, including, but not limited to, inserting, updating, deleting or otherwise modifying data through a means other than the Software, although AssetWorks is not obligated to correct such misuse, AssetWorks shall be entitled to attempt to correct the situation, if possible, at Customer's expense.

d. In the event that diagnostic assistance is provided by AssetWorks, which, in the reasonable opinion of AssetWorks and the Customer, relates to problems not caused by a Deviation in the Software, such assistance shall be at the Customer's expense.

7. **Software Maintenance Fee – Paid Up License.** In consideration of the Maintenance Services to be provided by AssetWorks for the initial 12 month period hereunder, Customer shall pay to AssetWorks the amount set forth in the Order Form or Invoice. For each 12 month period thereafter, Customer will pay to AssetWorks fees in accordance with this Agreement.

8. **Additional Software Maintenance Fee – Paid Up License.** In the event the Customer acquires AssetWorks Software licenses in addition to the Software previously provided under this Agreement (the "Additional Software"), the Maintenance shall automatically be extended to cover the Additional Software, and the Customer shall pay an additional annual Maintenance fee in an amount equal to 20% of the then current license fee for the Additional Software at the time of acquisition.

In the event that Customer purchases any custom interfaces, APIs or other Software (Developed Software), AssetWorks may also charge maintenance on the Developed Software in an amount equal to 20% of the cost of the Developed Software.

9. **Other Fees and Expenses.** If onsite maintenance is required, Customer will pay reasonable travel and living expenses of AssetWorks' employees or agents, which shall be billed and paid as the expenses are incurred.

10. **Payment Terms.**

a. Annual payments for Maintenance will be due in advance of the commencement of the initial 1-year term of the Maintenance and on each anniversary thereafter.

b. AssetWorks reserves the right to increase the annual Maintenance fee by providing Customer written notice of the increase at least 30 days prior to any scheduled renewal date.

11. **Default and Termination.**

a. The Customer shall have the right to terminate Maintenance upon delivery of written notice at least 90 days prior to any scheduled renewal date. Failure to provide such notice in the designated timeframe will not relieve Customer of the obligation for the full amount for the renewal period and termination notice will be applied to the following renewal term.

b. AssetWorks may cancel Maintenance in the event that the Customer does not implement a Mandatory Revision within 60 days of receipt thereof or such longer period as AssetWorks may consent to in writing. In the event that Customer does not implement a Mandatory Revision within 30 days following receipt of written notice from AssetWorks of Customer's failure to implement a Mandatory Revision, AssetWorks may then cancel Maintenance, effective immediately, by notice in writing to the Customer.

c. In the event of any breach of the terms and conditions of this Agreement by the Customer, AssetWorks will, by written notice to the Customer, give the Customer a period of 30 days within which to institute remedies to correct such breach. In the event that such breach has not been corrected to AssetWorks' satisfaction within said 30 day period, AssetWorks may then cancel Maintenance, effective immediately, by notice in writing to the Customer.

d. In the event that Maintenance is terminated by AssetWorks, AssetWorks shall have no continuing obligations to the Customer of any nature whatsoever with respect to Maintenance. Furthermore, termination by AssetWorks pursuant to the provisions of this Agreement shall be without prejudice to any right or recourse available to AssetWorks, and without prejudice to AssetWorks' right to collect any amounts, which remain due to it hereunder.

Attachment 3 – Professional Services Terms

1. Services / Statement of Work. AssetWorks will perform the Professional Services ("Services") described in the Statement of Work and/or Order Form ("Statement of Work"). The terms of this Attachment shall control any additional or future Statements of Work that may be executed by the parties during the Term of the Agreement. No Statement of Work shall be of any force and effect unless and until executed by both AssetWorks and Customer.

2. Price and Payment Term

a. Each Statement of Work will either be on a time and material basis or a fixed price basis, specified in the Statement of Work. The Statement of Work may or may not include a definitive list of "Deliverables" that must be completed by AssetWorks. In some instances, the Statement of Work will include a date by which "Deliverables" must be completed.

b. In the event that Services result in greater AssetWorks duties than contemplated by the Statement of Work, Customer will work closely and in good faith with AssetWorks to modify the Statement of Work to ensure that the Customer's requirements are addressed and AssetWorks' fees shall be adjusted to reflect increased Customer requirements.

c. Unless specifically addressed in the Statement of Work, all travel and expenses incurred will be extra and billed at the time of incurrence.

d. The preferred means of payment is by electronic funds transfer (EFT). EFT payments can be accomplished as either a Funds Transfer (Fed Wire) or Direct Deposit (ACH).

e. Custom modules, interfaces and other Software can be placed under the AssetWorks Software Maintenance program.

f. Bill to Address. The invoice will be mailed to the Customer address on the Order Form unless otherwise indicated in the Statement of Work.

3. Resources to be Provided by Customer

a. Customer shall provide, maintain and make available to AssetWorks, at Customer's expense and in a timely manner, the resources described in this Section, the Statement of Work, and such other additional resources as AssetWorks may from time to time reasonably request in connection with AssetWorks performance of the Services. Delays in the provision of these resources may result in delays in the performance of the Services, or an increase in the Price.
b. Customer will designate qualified Customer personnel or representatives to consult with AssetWorks on a regular basis in connection with the Services. Customer will furnish such documentation and other information as is reasonably necessary to perform the Services.
c. Customer shall furnish access to Customer's premises, and appropriate workspace for any AssetWorks personnel working at Customer's premises, as necessary for performance of those portions of the Services to be performed at Customer's premises.
d. Customer shall meet all assumptions noted on the Statement of Work.

4. Subcontractors. AssetWorks may engage subcontractors to assist in performing Services without the prior written consent of Customer; provided, AssetWorks shall supervise such sub-contractors and the Services performed by them to the same extent as if AssetWorks performed the work.

5. Termination for Default. Either party may terminate any Statement of Work if (i) the other party fails to perform a material obligation of the Statement of Work and such failure remains uncured for a period of 30 days after receipt of notice from the non-breaching party specifying such failure; or (ii) a party ceases to conduct business, becomes or is declared insolvent or bankrupt, is the subject of any proceeding relating to its liquidation or insolvency which is not dismissed within 90 days or makes an assignment for the benefit of creditors. In addition, AssetWorks may terminate any Statement of Work effective immediately upon written notice to Customer if Customer fails to make any payment in full as and when due hereunder. Termination of a Statement of Work shall not terminate this Agreement.

Upon termination for whatever reason and regardless of the nature of the default (if any), Customer agrees to pay AssetWorks the full value for all goods and/or Services provided to Customer up to and including the date of termination. For avoidance of doubt, where AssetWorks has not yet completed a milestone documented on the Statement of Work and this agreement is terminated for whatever reason and regardless of the nature of the default (if any), Customer shall pay to AssetWorks for the work completed up to and including at the time of termination.

6. Termination for Convenience. Notwithstanding any other provision in this Agreement, either party may terminate a Statement of Work by providing a 90-day notice of intent to terminate the Statement of Work.

7. Effect of Termination. The Terms of this Agreement shall survive for any Statement of Work which is still pending at the time of termination until the conclusion of the Statement of Work.

8. Professional Services Limited Warranty
a. AssetWorks warrants that the Deliverables provided under an Order Form or a Statement of Work authorized under this Attachment shall be performed with that degree of skill and judgment normally exercised by recognized professional firms performing the same or substantially similar Services. In the event of any breach of the foregoing warranty, provided Customer has delivered to AssetWorks timely notice of such breach as hereinafter required, AssetWorks shall, at its own expense, in its discretion either (1) correct the non-conforming Deliverables to conform to this standard; or (2) refund to Customer that portion of the Price received by AssetWorks attributable to the non-conforming Deliverables. No warranty claim shall be effective unless Customer has delivered to AssetWorks written notice specifying in detail the non-conformities within 90 days after tender of the non-conforming Deliverables. The remedy set forth in this Section (a) is the sole and exclusive remedy for breach of the foregoing warranty.
b. ASSETWORKS SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED STANDARDS, GUARANTEES, WARRANTIES OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, AND ANY WARRANTIES THAT MAY BE ALLEGED TO ARISE AS A RESULT OF CUSTOM OR USAGE, ANY WARRANTY OF ERROR-FREE PERFORMANCE, OR ANY WARRANTY OF THIRD PARTY PRODUCTS, OR FUNCTIONALITY OF THE CUSTOMER'S HARDWARE, SOFTWARE, FIRMWARE, OR COMPUTER SYSTEMS.
c. Customer represents and warrants to AssetWorks that Customer has the right to use and furnish to AssetWorks for AssetWorks use in connection with this Agreement any information, specifications, data or Intellectual Property that Customer has provided or will provide to AssetWorks in order for AssetWorks to perform the Services and to create the Deliverables identified in the Statement of Work.

9. Relationship of Parties. AssetWorks is an independent contractor in all respects with regard to any Professional Services. Nothing contained in this Agreement shall be deemed or construed to create a partnership, joint venture, agency, or other relationship other than that of contractor and Customer.

Attachment 4 - Hosting Terms

1. **AGREEMENT OVERVIEW.** AssetWorks provides hosting Services ("Data Center") to support customers that wish to outsource the operation and maintenance of the AssetWorks Software licensed by Customer under separate licensing agreements.

This Agreement, the Service Level Agreement and the Hosting Scope of Service describe the hosting Services to be provided by AssetWorks ("Hosting Services"), the respective responsibilities of the parties.

G. SERVICES. AssetWorks will perform the Hosting Services as described in the Scope of Services, set forth in below.

The scope of Services specifically excludes operation and maintenance of the following:
- Customer Hardware, including Customer's servers, printers, network Hardware (including routers and switches) and other Customer site computing equipment;
- Customer application Software other than noted in the Scope of Services; and
- Customer Local Area Networks ("LAN")

- Customer network infrastructure for connecting to the Internet and to the Data Center

The Services shall be provided subject to the Terms and Conditions, which follow.

H. **FEES AND PAYMENT; COMMENCEMENT.** Customer shall pay AssetWorks the applicable fees as set forth in the Order Form. For new Customers, billing for hosting shall commence upon the Effective Date. For existing Customers who are migrating to the hosted environment, billing shall commence when Customer is notified that the hosted production or test environment has been established.

I. **CUSTOMER RESPONSIBILITIES.** The Customer is responsible for:

- Assigning a primary and alternate Customer designated key personnel to coordinate all communications and activities related to AssetWorks Services.
- Providing user identification data and determining the appropriate security profile for each user. Customer will control security at the Application level.
- All printing. No print job will print at the Data Center and all physical printing requirements will be handled by the Customer.
- The purchase and installation of printers at Customer's sites for the Application being utilized as defined in the Scope of Services.
- Installation, operation and maintenance of all workstation Software (and Customer's LAN, existing data communications configuration, Hardware, or Software required at the Customer's site except as otherwise stipulated in the Scope of Services. AssetWorks network and network responsibility extends from the AssetWorks routers at AssetWorks' sites to all connected equipment at AssetWorks' sites.
- Testing updates and fixes applied by AssetWorks to Applications used by Customer. With the exception of emergency fixes, Customer will test updates and fixes prior to their introduction to the Production environment within a mutually agreed upon time frame.
- Testing upgrades. Upgrades will be moved to production by the AssetWorks at the end of the Customer testing period unless specific problems are documented in writing to AssetWorks.
- Diligent analysis of suspected problems to determine their specific nature and possible causes before calling the AssetWorks for assistance. Notwithstanding this diligence requirement, Customer is responsible for informing AssetWorks of any problems encountered in a timely manner.

J. **OWNERSHIP OF DATA.** Customer shall not obtain any ownership rights, title or interest in the Software, Hardware or systems developed or employed by AssetWorks in providing Services under the Agreement. AssetWorks shall not obtain any ownership rights, title or interest to Customer's data files. Upon expiration or termination of the Agreement for any reason, AssetWorks agrees to provide Customer with a copy of Customer's data files, as they exist at the date of expiration or termination. Data will be delivered in one of the following formats ASCII comma, separated value (CSV Format) with binary images TIFF, JPG, PDF. Customer requests for data to be provided in any other format are subject to approval by AssetWorks and may require an additional fee.

Hosting Scope of Services

All of the Services, functions, processes, and activities described below will be collectively described as the "Hosted Services" for purposes of this Agreement.

Application

Application refers to the Customer's licensed AssetWorks Software, and third party Software hosted by AssetWorks.

Support Software

Support Software includes the operating system, utilities, database Software, and all necessary licenses required to operate the Application.

Hardware

Server infrastructure using redundant web servers and Oracle RAC database servers is deployed within the primary Data Center.

If required by Customer, Customer shall provide the telecommunications equipment (including the routers to be installed at the Data Center), communication line, and Services for connection from Customer's site to the Data Center.

Database Instances

AssetWorks will maintain a single Production Database instance. This Production Database will provide the daily, real-time transaction data to the Application users.

In addition to the Production Database, AssetWorks will maintain one additional, non-production Database (Test). Upon request by Customer, AssetWorks will populate these additional Databases with Customer's Production data up to 4 times in any 12 month period at no additional cost.

Custom Reports

Custom Reports may be ordered pursuant to a Statement of Work for an additional charge.

Backups

Database and file system backups are performed daily. Backup data is stored and retained at a secure offsite facility for 14 days.

Hours of System Operations

The Application will be accessible and available to the Customer and capable of any and all normal operating functions 24 hours a day, 7 days a week except for periods of Scheduled Maintenance and previously approved outages. AssetWorks will not be held responsible for inaccessibility arising from communications problems occurring anywhere beyond the AssetWorks external network interface, nor will these hours of unavailability be counted as unavailable.

Maintenance

AssetWorks will complete routine maintenance on the Application according to the published schedule. AssetWorks will publish schedules for subsequent years on its Customer Support web site. AssetWorks will endeavor to provide at least 30 days notice to any changes in the schedule, except in the event of emergency maintenance.

If AssetWorks is required to perform additional maintenance outside of the Scheduled Maintenance window, it will notify the Customer in writing of its request. The Customer and the AssetWorks will mutually agree on the downtime. All routine, additional, and emergency maintenance will be considered a period of Scheduled Maintenance.

Data Classification

The AssetWorks Data Center maintains SSAE16 SOC2 certification/ISO27001 compliance as a facility housing CUI (Controlled Unclassified Information) data at our facility based on the DOJ assessment using NIST 800-53 guidelines for FISMA (Federal Information Standards Management Agency) standards.

The service levels set forth below apply to the Services provided by AssetWorks under the Agreement.

AVAILABILITY

AssetWorks will use commercially reasonable efforts to provide Services with an average of 99% Availability (as such term is hereinafter defined) for each quarter during the Term. For purposes of the Agreement, "Availability" during any quarter refers to an Authorized User's ability to log into the Application during such quarter, and will be calculated in accordance with the following formula:

$$x = (y - z) / y * 100$$

Where,

- "x" is the Availability of the Application during the quarter;
- "y" is the total number of hours in such quarter minus the number of hours during such quarter that the Customer is unable to log into the Application because of (a) regularly scheduled maintenance windows for the Application and for times in which Customer has been notified in writing (including e-mail) by AssetWorks in advance thereof; (b) a Force Majeure Event; (c) non-performance of Hardware, Software, ISP connections, and other equipment that is not provided by AssetWorks or certified by AssetWorks for use in conjunction with the Services (except as such non-performance is directly or indirectly caused by AssetWorks).
- "z" is the number of hours in such month during which the Customer is unable to log into the Application (other than for reasons set forth in the definition of "y" above); provided that AssetWorks has been notified or is otherwise aware (or reasonably should be aware) of Customer's inability to utilize the Application.

FEE ADJUSTMENT

In the event that AssetWorks does not meet the Availability levels set forth below, the amount of fees payable by Customer will be reduced as follows:

In the event the average Availability for the Application is less than 99% during any two consecutive quarters, Customer will receive a credit to its account with AssetWorks of 5% of the amount of a quarter's aggregate AssetWorks Hosting Services fees paid or payable by Customer to AssetWorks.

AssetWorks' obligation to provide Customer with fee adjustments as set forth above is conditioned on Customer providing detailed written notice to AssetWorks of its contention that AssetWorks was unable to meet the applicable Availability levels. Upon receipt of such notice, AssetWorks shall have 30 calendar days to investigate the contention. If, at the end of the 30 calendar day period it is determined that AssetWorks did in fact fail to meet the applicable Availability levels, Customer will receive the appropriate credit to its account during the next invoice cycle.

The remedies set forth in this Section of this Attachment shall be Customer's sole remedy and AssetWorks' entire liability in the event of a breach of this Agreement, including the failure of any Availability measurements to meet the thresholds set forth above.

Attachment 5 – AssetWorks Hardware Terms

1. **PRICE/SPECIFICATIONS.** Price and specifications are subject to change without notice. AssetWorks LLC is not responsible for typographical and/or photographical errors.

2. **PAYMENT TERMS.** All Hardware will be billed upon delivery. All FuelFocus Integration Licenses will be billed upon delivery of Hardware. Please inspect all orders upon receipt. Please email fuelsupport@assetworks.com to request an RMA for any missing, damaged, or incorrect orders. You may also call 610-225-8350.

3. **RETURN POLICY.** AssetWorks LLC products may be returned within 30-days of invoice date for refund, replacement, or exchange. All product returns must have a Returned Merchandise Authorization (RMA) number issued by AssetWorks marked clearly on the return package, or the package will be refused, and no credit will be issued.

To request an RMA, please email fuelsupport@assetworks.com . RMAs are valid for 15 days from the date of issuance. The following information is required for all RMAs:

a. The invoice or packing list number;
b. The product name and part number;
c. Company name, point of contact, mailing address, email address, and telephone number; and
d. A reason for the return

If you wish to make a return or exchange, you must present the merchandise within 30 days of purchase. All goods must be returned in their original packaging. If the items are not received in their original and unused condition, a minimum re-stocking fee of 18% will be charged. Product that has been used will not be accepted for return or exchange unless under warranty or maintenance contract. Product that has been altered without the specific authorization by AssetWorks will not be accepted. Send returns with the RMA number clearly marked on the package to:

AssetWorks LLC
Attn: RMA Department
998 Old Eagle School Road, Suite 1215
Wayne, PA 19087

All returns will be processed and fully inspected. All products must be returned in original condition including packaging, manuals, and accessories (as applicable).

4. **RETURN SHIPPING**. All returns must be shipped freight pre-paid.

5. **UNAUTHORIZED OR REFUSED RETURNS**. Packages without a Return Authorization Number will be refused. Additional charges may apply if all peripherals and accessories are not returned in the original packaging.

6. **RETURNS OLDER THAN 30 DAYS**. Returns older than 30 days from the invoice date will be subject to a 25% restocking fee. Only product that is in current production will be accepted and an RMA must be obtained in advance and clearly marked as stated above. No refunds will be given.

7. **WARRANTY START DATE.** "Start Date" as used in this policy means the date this product is shipped from AssetWorks manufacturing plus 3 months or the FuelFocus go live date, whichever comes first.

8. **LIMITED HARDWARE WARRANTY.** Warranty coverage for AssetWorks LLC (FuelFocus) products are described below. Additional support coverage can be purchased with your AssetWorks products. Please consult your local AssetWorks sales professional for annual support and Services fees. The terms and conditions governing your warranty on AssetWorks products are located below. Such terms and conditions supersede all other terms, unless otherwise agreed by AssetWorks.

AssetWorks, LLC ("FuelFocus") provides a 1 year limited product Hardware warranty to purchasers of FuelFocus products. AssetWorks warrants that the product Hardware will be free from defects in materials and workmanship during the warranty period, subject to the following:

(a) Labor and travel costs are not included, unless required under contract specific terms;
(b) AssetWorks will supply new or rebuilt parts to replace parts that are found to be defective while within the warranty period;
(c) New installations must be registered with the FuelFocus Support Center within 48 hours of installation to receive warranty benefits, otherwise, the warranty period commences on the date of the invoice;
(d) Help Desk Support is available between the hours of 8:00AM- 5:00PM EST Monday through Friday upon a Hardware System Failure;
(e) AssetWorks will repair or replace such product Hardware within 14 working days of its receipt of the failed Hardware, if in advance of its receipt, such Hardware (1) was evaluated by AssetWorks Technical Support in person or via telephone, and (2) received a Technical Support RMA number from AssetWorks;
(f) Further, the product Hardware must be shipped, shipment pre-paid, to AssetWorks, and the RMA number must be clearly indicated on the shipping box and papers;
(g) Problems caused by faulty installation are not covered under this warranty. This warranty applies only if the equipment has been installed and used in accordance with the AssetWorks Installation Manual;
(h) Use of service personnel other than qualified AssetWorks service providers without prior written approval of the FuelFocus Product Manager will void the warranty claim;
(i) Use of non AssetWorks replacement parts, defects caused by the use of unauthorized addition of non AssetWorks parts, or by the unauthorized alteration of FuelFocus parts or equipment will void this warranty;
(j) Damage suffered by FuelFocus equipment resulting from shipping, accident, power surges, neglect, misuse, acts of Nature, or abuse are not covered by this warranty.

9. **LIMITED SOFTWARE WARRANTY**. AssetWorks provides a 1 year limited Software warranty to licensees of FuelFocus Software accompanying AssetWorks Hardware. AssetWorks warrants that the media on which the Software is delivered will be free of defects in material and workmanship for a period of 1 year following delivery of the Software to licensee. AssetWorks warrants that the Software, when used in accordance with the terms of the AssetWorks Software license, will operate substantially as set forth in the applicable AssetWorks Documentation for a period of 1 year following delivery of the Software to licensee.

10. **WARRANTY LIMITATIONS**. AssetWorks' warranties as set forth herein ("Warranty") are contingent on proper use of the FuelFocus Hardware and Software ("Products") and do not apply if the Products have been modified without AssetWorks' written approval, or if the Products' serial number label is removed, or if the Product has been damaged. The terms of the Warranty are limited to the remedies as set forth in this Warranty.

THIS WARRANTY IS PROVIDED IN LIEU OF ALL OTHER RIGHTS, CONDITIONS AND WARRANTIES. ASSETWORKS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE SOFTWARE, HARDWARE, PRODUCTS, DOCUMENTATION OR ASSETWORKS SUPPORT, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. ASSETWORKS DOES NOT WARRANT THAT ANY PRODUCTS WILL BE ERROR-FREE, OR THAT ANY DEFECTS THAT MAY EXIST IN ITS PRODUCTS CAN BE CORRECTED. IN NO EVENT SHALL ASSETWORKS BE LIABLE FOR COST OF PROCUREMENT OF SUBSTITUTE GOODS, LOST PROFITS OR ANY OTHER SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING BUT NOT LIMITED TO LOST DATA), HOWEVER CAUSED WHETHER OR NOT ASSETWORKS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

11. **TECHNICAL SUPPORT ACCESS**. During the warranty period, toll free phone support is offered 5 days per week (8 a.m. to 5:00 p.m., Monday through Friday, except holidays). Calls left after hours will be returned the next business day. Access to Technical Support after warranty period is on a commercially reasonable basis (unless an AssetWorks Support Contract is purchased for all systems owned by the customer).

12. **SOFTWARE UPDATES.** During the warranty period, Software updates for system Software and Software products released by AssetWorks are available by contacting AssetWorks Technical Support. System Software updates include applicable minor releases (e.g. Release 2.0 to 2.1) to the AssetWorks family of products as well as major feature releases (e.g. Release 2.x to 3.0). Customer must

have access to the Internet for Web Browser or FTP downloads as directed by Technical Support. Software updates released after the initial 1 year warranty period are available as an upgrade product for the then applicable list price.

Exhibit F

AssetWorks GPS / Telematics System Solution

Master Terms of Service

The AssetWorks Online Master is between the entity ("Customer" or "You") stated on the Order Form ("Order Form"), and AssetWorks LLC ("AssetWorks"). It consists of the terms and conditions listed below, as well as the details on the Order Form (together, the "Agreement"). It is effective on the date the Order Form is signed by both parties ("Effective Date").

As set forth in this Agreement, AssetWorks will be providing CUSTOMER with hardware, software and services for a telematics solution for CUSTOMER to obtain data pursuant to Global Positioning Satellite (GPS) tracking, routing, dispatching, and engine diagnostics (the "Services") for use by CUSTOMER's Fleet Services.

1. AssetWorks agrees to sell and the Customer agrees to buy AssetWorks Field Service Solution (FSS) products and services as indicated on the first page/order form, including hardware, software, and related technical services.

License

2. Subject to the terms and conditions in this Agreement and Customer's payment of all sums due, AssetWorks grants to the Customer and the Customer accepts a non-exclusive, non-transferable, revocable license for the term of this Agreement and any renewal term to : a) access and use the Service including and all the printed and digital materials including, but not limited to, user documentation, training documentation, or technical information and briefings supplied under this Agreement (the "Documentation") and b) access and use the AssetWorks File Transfer Protocol ("FTP") or website resources made available to the Customer for Customer's internal use only provided that Customer follows any AssetWorks terms of use policy specified on the FTP or web site. Except as expressly provided in this provision, CUSTOMER's AssetWorks Software license will be subject to the Software License Agreement between CUSTOMER and AssetWorks.

Restrictions

3. Customer may use the Service only in conjunction with Customer's normal internal business operations and not on behalf of, or for the benefit of any other entity. Customer may not (a) publish, display, rent, timeshare, rent, lease, lend, loan, distribute, sublicense, remarket, resell or otherwise commercially exploit or transfer the Service or any part or derivative thereof; (b) create derivative works based on the Service or any part thereof; (c) resell data or services which are derived from the Service; (d) attempt to pass title to the Service or any component thereof, to any third party; (e) reverse engineer, decompile, translate, adapt, or disassemble any part of the Service, nor shall Customer attempt to create the source code from the object code for any part of the Service. Customer further agrees that it will not interfere with or disrupt the integrity or performance of the Service or the data contained therein or attempt to gain unauthorized access to the Service or its related systems or networks.

Intellectual Property Rights and Reservation of Ownership

4. The Service products whether on disk, in read only memory, on any other media or in any other form including any portion embedded in an AssetWorks hardware product are licensed, not sold, to the Customer by AssetWorks for use only under the terms of this License Agreement. The Customer agrees to use reasonable efforts to protect the Service products from unauthorized use, reproduction, distribution or publication

.

5. AssetWorks and its licensors retain all rights, title, and ownership to the Service products and AssetWorks reserves all rights not expressly granted to the Customer including the rights, title and ownership of any related instructions, data bases, and technology embedded therein or upon which it is based, and the related patent rights, copyrights, trade secrets, trademarks and all other related intellectual property rights.

6. The terms of this Agreement will govern any software upgrade provided by AssetWorks that replaces and/or supplements the original Service product, unless such upgrade is accompanied by a separate license agreement in which case the terms of that agreement will govern.

Rights in the Service (SAAS)

7. This Agreement does not convey any rights of ownership in the Service. All right, title, and interest in and to the Service and all modifications, enhancements, and additions to the Service (including ownership of all trade secrets, copyrights, and other proprietary rights) will remain the property of AssetWorks. The Customer must keep the Service free and clear of all claims, liens, and encumbrances.

Customer's Data

8. AssetWorks does not own any data, information or material that the Customer submits to the Service in the course of using the Service ("Customer Data"). The Customer, not AssetWorks, will have sole responsibility for the accuracy, quality, integrity, legality, reliability, appropriateness, and intellectual property ownership or right to use of all Customer Data, and AssetWorks shall not be responsible or liable for the deletion, correction, destruction, damage, loss or failure to store any the Customer Data. Unless otherwise noted in Attachment A – FSS Pricing, Customer Data will be kept for 1 year with the exception of the electronic driver log data which will be kept for 6 months.

Inspection Rights

9. AssetWorks shall have the right to inspect the Software, once each calendar year, in order to verify the Customer's compliance with the licenses granted under this Agreement. The Customer will provide reasonable access to its facilities and AssetWorks will exercise its right to inspect reasonably and during regular business hours.

Equitable Relief

10. The Customer agrees that any breach of this Agreement by the Customer/Customer may cause irreparable damage and that, in the event of such breach, in addition to any and all remedies at law, AssetWorks shall have the right to seek an injunction, specific performance, or other equitable relief in any court of competent jurisdiction to prevent violation of these terms and without the requirement of posting a bond or undertaking or proving injury as a condition for relief.

Third Party Software

11. The AssetWorks Products described in this Agreement may include software licensed by AssetWorks from third parties. The license terms of this Agreement will apply to the use of the Third Party Software identified above and the licensors of such software are third party beneficiaries of the rights granted under this Agreement.

Login Credentials

Customer is solely responsible for the failure to keep all user identifications and passwords (Customer "Login Credentials") secure. If Customer believes the security of Customer Login Credentials has been compromised, or if Customer suspect unauthorized use, Customer must promptly notify AssetWorks. We will be entitled to treat all communications, instructions and transactions as authorized by Customer if Customer's Login Credentials are used unless Customer has notified us of compromise or unauthorized use of Customer's Login Credentials. If we suspect, in our reasonable opinion, fraudulent or unauthorized activity on Customer's account, we reserve the right to terminate or suspend Customer's access to our website or any applicable services or both and will contact Customer to advise of this decision.

Warranties

12. Warranty on third (3rd) party products, where sold as part of the AssetWorks FSS, will be as offered by the original manufacturer's warranty terms and customer will be subject to these terms.

13. **Customer Responsibilities.**

A. The Customer is responsible for shipping and shipping related costs of products to/from AssetWorks' facility.

B. The Customer is responsible for following AssetWorks' Return Materials Authorization ("RMA") procedures when returning any hardware item to AssetWorks. RMA's forms must be filled out with the required data in all fields including a description of the failure mode.

C. The Customer is responsible for "swap out" services if required including:
   1. Maintaining sufficient spare unit inventory between 5% & 10% Products as directed by AssetWorks and based on the scope of the project;
   2. Paying the costs of subcontractor installer's services required to remove defective Products and install spare units for use while Products are being repaired by AssetWorks.

Limitation of Warranties Disclaimer

14. The Service products are not fault-tolerant and not designed, manufactured, or intended for use or resale for insurance underwriting or with critical health and safety or online control equipment in hazardous environments that require fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, emergency response, terrorism prevention or response, life support, or weapons systems or other devices or systems in which a malfunction of the Service products would result in foreseeable risk of injury or death to the operator of the device or system, or to others. AssetWorks specifically disclaims any express or implied warranty of fitness for such high risk activities.

15. AssetWorks makes no warranty and expressly disclaims that: a) the Service will meet the Customer's specific requirements; b) the Service will be uninterrupted, reliable, timely, secure, error-free or free of viruses and other harmful components; c) any errors on the AssetWorks web site or service will be corrected; and d) that documents or materials that the Customer stores via the service will remain accessible.

16. AssetWorks makes no warranty in respect of radio (cellular) coverage or the privacy, security, authenticity or non-corruption of any information transmitted through the internet or any information stored in any system connected to the internet and specifically excludes such warranties.

17. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ASSETWORKS AND ASSETWORKS' LICENSORS DISCLAIM ALL WARRANTIES NOT EXPLICITLY STATED IN THIS AGREEMENT AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW, OR FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Delivery

19. The Products provided will be delivered to the Customer by AssetWorks and at the Customer's expense. All risk of loss to the Products will remain, however, with AssetWorks until the Products are delivered and received by the Purchaser.

20. AssetWorks will ship via FedEx 2-day/Economy. The Customer will be responsible for any surcharges incurred if the Customer wishes to use an alternative shipping service.

21. The Customer will report any discrepancies in shipment quantities/descriptions in writing to AssetWorks within 5 working days after receipt of any goods. If no discrepancy is submitted within such time period, the shipment is deemed to be complete and accepted by the Customer.

22. For any shipment returning to AssetWorks', the appropriate Return Materials Authorization ("RMA") process shall be used as follows:

A. Send an email to fss.support@assetworks.com with the following MANDATORY information.
   1) Serial Number: Required for EACH unit being returned.
   2) Problem Description: Required for EACH unit being returned.
   3) Billing / Shipping Address (including Federal Tax ID# for US Customers)

B. A response can be expected within one to two business days. This will include
   1) A Return Materials Authorization (RMA) #.
   2) Shipping Instructions.

Safety and Installation

23. The Customer acknowledges and understands that: a. a computer in a vehicle has the potential to distract the driver from the primary task of driving which can compromise a vehicle's safety; b. Customer personnel should always follow all safety precautions and laws and be aware of any construction and other hazards; and c. Customer personnel should always recheck directions and driving conditions for accuracy and confirm that a road still exists.

24. In the event that the Customer is responsible for installation services for the Project, AssetWorks will provide AssetWorks' Installation Guide and the Customer will provide each person responsible for installation services with AssetWorks' Installation Guide.

25. The Customer acknowledges and understands that the use of aftermarket equipment in motor vehicles can compromise a vehicle's safety-related design characteristics, including but not limited to: a. Airbags, including but not limited to potential obstruction of airbag deployment; b. Passenger compartment, including but not limited to potential for ergonomic problems, physical obstacles, etc.; and c. Trunk/gas tank protection, including but not limited to the potential for trunk-mounted equipment to exacerbate tank vulnerability in a rear collision.

26. If the Customer is responsible for installation of Service products the Customer must ensure that the installations are performed safely and that all equipment provided under this Agreement remains in accordance with all applicable codes, rules, regulations and guidelines provided by motor vehicle and equipment manufacturers, as well as any provincial, local or jurisdictional bodies. AssetWorks will not have any responsibility for determining whether any of the above requirements are met by the Customer or Installer, in general, or for any specific equipment provided under this Agreement.

Software Maintenance and System Support

27. Software Maintenance & 24 x 7 System Support.

A. We continuously improve our Products and may, from time to time, cause software updates to be automatically installed with or without prior notification to you or provide access to updates through our website. You hereby consent to such automatic installations and agree to use only the updated version once it has been installed.

During the term of this Agreement and subject to payment of the applicable periodic fee AssetWorks will provide Software Maintenance & System Support (excluding "After Hours" support calls for issues that are not "System Critical") for the current supported versions of the AssetWorks Field Service Solutions System (FSS) including:

Software Maintenance:

1. Corrections to Software or Database defects as applicable in AssetWorks' discretion;
2. Updates to the System and Service, including, from time to time, minor modifications and enhancements (improved or additional capabilities) as applicable in AssetWorks' discretion;
3. Updated **map data** will be provided to the web based application for each major revision and map data for navigation will be made available to the Customer twice each year;
4. AssetWorks will maintain appropriate administrative, physical, and technical safeguards for protection of the **security**, confidentiality and integrity of Customer data;
5. AssetWorks will place the Customer on AssetWorks' regular **mailing list** to receive all announcements including enhancements to the Software furnished under this Agreement;

Major modifications and enhancements that are made to the Service (e.g., significant additional functionality) are done at AssetWorks' sole discretion and may be subject to the imposition of additional charges.

System Support:

1. Remote support to the representative designated by Customer as the Key Technical Contact in accordance with the selected Support Plan. "Remote support" includes telephone, email, and cellular phone support.
2. Investigation, confirmation, and correction of any defect in software upon receipt of written notice of a suspected defect from Customer.
3. System troubleshooting by liaising with Customer's other suppliers. "Troubleshooting" means the actions taken to identify, accurately describe, and determine the root cause of any problem arising in conjunction with any Licensed Products.
4.

B. Using commercially reasonable efforts AssetWorks will provide the System Support services described above as follows:

1. **System and General Issues.** During AssetWorks' regular business hours (8:00AM until 5:00PM MST/MDT) Monday to Friday, excluding Canadian statutory holidays.
2. **For System Critical Issues.** Engineering and technical support will be provided twenty four hours per day, seven days per week for System Critical issues only. A "System Critical" issue is one in which the performance or non-performance of Licensed Products causes the system to be unusable. AssetWorks will respond by contacting the Customer within thirty (30) minutes of Customer's call;

The Canadian statutory holidays are as follows: New Years Day (January 1), Family Day (third Monday of February), Good Friday (Friday before Easter/variable), Victoria Day (Monday before May 25), Canada Day (July 1except when it falls on a Sunday, then Monday July 2), Alberta Heritage Day (first Monday in August), Labour Day (first Monday of September), Canadian Thanksgiving (second Monday of October), Remembrance Day (November 11), Christmas Day (December 25).

24 x 7 Support Procedures.

28. 24 x 7 Support Procedures. The Customer will follow the procedures below when accessing 24 x 7 Support:

A. During the Day: Support is available through either telephone, 403-777-3760 ext. 2, or email, FSS.support@assetworks.com

B. After Regular AssetWorks Business Hours:

1. After hours support is defined as support required outside of AssetWorks' standard business hours of 8:00am – 5:00pm MST, excluding weekend and Canadian statutory holidays.
2. If you experience a system-wide failure and require after hours support, phone the AssetWorks 24x7 hotline. AssetWorks will provide Customer with an After-Hours Support telephone number ("AssetWorks' 24x7 Support Hotline") and associated procedures upon contract execution.

29. AssetWorks will endeavor to resolve any System problems remotely. If it is necessary for AssetWorks to travel to the Customer's location to resolve the problem then additional costs will be quoted.

30. The parties agree that this Support Plan does not include any training services. AssetWorks may require Customer to complete additional training courses at Customer's expense if support calls from Customer to AssetWorks are related to a failure of Customer to understand how to use the AssetWorks Products described in this Agreement.

31. Customer Responsibilities.

A. In addition to the periodic fee for the Fleet System Service the Customer will pay AssetWorks' prevailing rate plus applicable taxes for the following services:

1. Non-Warranty Hardware Repair
2. Non- System Critical Support Calls made After Hours
3. Additional Support, Technical or Training services not otherwise covered under this agreement.

B. The Customer remains responsible for:

1. any costs associated with any required improvements to its facilities to facilitate the proper functioning/effective implementation of the AssetWorks Fleet system and Service;
2. using the services only in accordance with the AssetWorks documentation including any User Guide and applicable laws and government regulations;
3. for the accuracy, quality and legality of Customer's data and of the means by which it was acquired;
4. prevention and prompt notification (to AssetWorks) of unauthorized access to or use of the services;
5. end users' compliance with this Agreement.

C. Customer will identify a Key Technical Contact from its personnel who will be responsible for communications between AssetWorks and Customer for the duration of this Agreement. All technical support questions and communications will be directed through the Key Technical Contact.

D. The Key Technical Contact will have: authority to make decisions on behalf of Customer and manage internal personnel and resource requirements to maintain the System and facilitate the accurate reporting of any issues:

1. Basic knowledge of computer hardware,
2. Basic to intermediate computer skills.
3. Access to an competence with e-mail, and
4. Ability to work through technical issues, specifications and specific technical documentation.

E. The Customer will provide AssetWorks personnel with access to physical equipment maintained by the Customer (including, without limitation, individual computers, networks and/or vehicles which utilize the Service), and access to the Customer's third party suppliers as needed. Third party suppliers include the fixed network link provider, the communications network provider, and the host application software provider.

Price and Payment Terms

32. All prices under this Agreement will be in the currency indicated on the first page/order form and do not include any sales/use taxes. AssetWorks will add applicable sales/use taxes to the pricing when required by law to do so.

33. Payment terms for the products and services as noted in Attachment 1, FSS pricing, will be as follows on a net 30 basis:

a) FSS SAAS
   a. will be billed monthly, starting in the month which equipment is shipped with the exception of units that are designated as part of the recommended 5% to 8% hardware spare pool for Customer swap out maintenance.

b) Cellular Air Time Overage (need to determine plan during contract preparation)
   a. Ranger/MDT7 Products - 50MB/month of Cellular Airtime is included in the monthly plan. Typical use of FSS requires less than 30MB/month. If Customer exceeds the data use, overage charges of $0.90/MB will apply and be billed at the end of the month incurred.
   b. MEXX GPS Products – 3MB/month of cellular airtime is included in the monthly plan. Typical use of FSS for GPS only devices requires approximately 2MB. If customer exceed the data use, overage charges will apply and be billed at the end of month incurred

c) ME105/110 billed as per pricing Attachment A – FSS Pricing.

   Hardware (with or without Ascentium)
   a. AssetWorks shall submit a monthly invoice for all hardware shipped that month with related shipping charges.
   b. If Customer is financing through Ascentium Capital, Customer hardware payments will be made to Ascentium directly as per Ascentium financing terms And AssetWorks will invoice Ascentium.
   c. If Customer is financing through Equilease, Customer hardware payments will be made to Equilease directly as per Equilease financing terms and AssetWorks will invoice Equilease.

d) Professional Services will be billed (need to choose during contract preparation):
   a. Monthly at end of month for any work completed in that month
   b. On a milestone completion basis for services delivered in the milestone as defined in Attachment A – FSS Pricing
   c. If Customer is financing through Ascentium Capital, service payments will be made to Ascentium directly as per Ascentium financing terms.
   d. If Customer is financing through Equilease, service payments will be made to Equilease directly as per Equilease financing terms.

e) Travel expenses
   a. Billed as incurred

34. AssetWorks will invoice and the Customer will pay for the Service and Service products described in this Agreement as delivered.

35. The Customer will pay AssetWorks' prevailing support rate (per hour per person) to provide support for tasks not covered by the Software Maintenance & System support terms and for after hours engineering/technical support provided for any system support issue that is not considered "System Critical". AssetWorks will bill in ½ hour increments after the first hour and invoice for accrued costs incurred providing non-system critical support calls made after hours at the end of any month that billable service is provided.

36. AssetWorks will invoice the Customer for the repair of non-warranty items and any diagnostic fee as repair services are provided for AssetWorks manufactured hardware.

37. The Customer will remit payment within thirty (30) days of the date of any invoice.

38. Payments received shall be applied in the following order: (1) To payment of any outstanding interest accrued on overdue payments, (2) to payment of the earliest invoiced Products and in the order that such Products appear on such invoices.

39. All payments are non-refundable.

40. If the Customer does not remit payment as described above AssetWorks reserves the right to suspend the Service (with no obligation to provide notice) and/or charge interest at a rate of one and one half per cent (1.5%) per month until the Customer has remitted all outstanding amounts due to AssetWorks.

41. Upon execution of this Agreement, AssetWorks will provide and the Customer will complete AssetWorks' application for credit.

Term of the Contract

42. The initial term of this Agreement is as indicated on the first page of this Agreement. At the end of the Initial Term, the Agreement shall automatically renew for successive one-year terms unless or until either party provides the other party with written notice of non-renewal at least ninety (90) days prior to the end of the then current term. If applicable, AssetWorks will provide a revised pricing schedule for Products and services to reflect any price changes ninety (90) days prior to each such annual renewal.

43. Either party may terminate the automatic renewal by providing the other with ninety days (90) written notice prior to the start of any renewal period.

Title

44. AssetWorks retains title to the Service products provided in accordance with this Agreement until AssetWorks has received full payment for all products delivered, including interest accrued, if any.

Delays

45. Neither party will be in default or liable for any delay or failure to comply with this Agreement due to any act beyond the control of the affected party provided such party immediately notifies the other.

Compliance with Laws and Payment of Taxes

46. The Customer agrees to: a. Comply with all laws, regulations and orders relating to this Agreement and the AssetWorks Products; b. Pay all taxes, license fees, assessments and sales, service, use, consumption, and all other governmental taxes, charges, fees, fines or penalties imposed by any government, upon the Products and Services; and c. File all necessary declarations and returns required by any governmental authority having jurisdiction.

Confidentiality/Non-Disclosure

47. The Customer and AssetWorks agree (a) to protect any Confidential Information of the other with at least the same degree of care used to protect its own most confidential information; (b) not to use (except for the purpose described in this agreement), publish or disclose to third parties such Confidential Information; and (c) upon the request of the other party, to promptly deliver to the other party all written copies of its Confidential Information. "Confidential Information" shall include trade secrets, financial information, including pricing, technical information, including research, development, procedures, algorithms, data, designs, computer programming techniques and know-how, business information, including operations, planning, marketing interests, sales, cost, and products, samples including models, prototypes and/or parts thereof, the terms of any agreement entered into between the Parties and the discussions, negotiations and proposals related thereto, and information acquired during any facilities tours.

48. These Confidential Information provisions shall not preclude either party's use of any data which (a) was in the possession of such party without restriction as to use having been acquired from a third party or independently developed by such party prior to receipt of the same or similar data from the other party; (b) is or becomes available from a public source on or after such receipt from the other party, or; (c) is obtained by such party from a third party not under an obligation of confidentiality or other restriction with respect to use subsequent to receipt from the other party.

49. The Parties agree to require affiliates, subcontractors and their subcontractors of any tier, if any, to expressly comply with the confidentiality provisions as set forth in this Agreement.

50. The Customer and AssetWorks will not use each other's name or logo in marketing, endorsements, or other business purposes without written consent from the other.

Limitation of Liability

51. The CUSTOMER acknowledges and agrees that AssetWorks shall not be liable to the CUSTOMER OR ANY THIRD PARTY for any claim or action including costs arising out of the use or misuse of any motor vehicle operated by the CUSTOMER CAUSED SOLELY BY THE CUSTOMER OPERATOR IN CONJUNCTION WITH OR SEPARATE FROM THE USE OF THE ASSETWORKS PRODUCTS DESCRIBED IN THIS AGREEMENT INCLUDING ANY PERSONAL INJURY CLAIM OR ACTION AND THE CUSTOMER SHALL DEFEND, INDEMNIFY, AND HOLD ASSETWORKS HARMLESS FROM ANY SUCH CLAIM OR ACTION INCLUDING ALL LEGAL COSTS INCURRED. THE LIMITATION OF LIABILITY AND INDEMNITY PROVIDED IN THIS PARAGRAPH SHALL NOT APPLY TO CLAIMS ARISING OUT OF OR CONTRIBUTED TO BY ANY DEFECT OR MALFUNCTION OF ASSETWORKS' PRODUCTS.

52. The Customer acknowledges and agrees that it is solely responsible for providing and ensuring the proper training of its drivers, owners or operators in the operation of the motor vehicle or motor vehicles in conjunction with the use or operation of the AssetWorks Products described in this Agreement.

53. The Customer agrees that to the fullest extent permitted by law, AssetWorks shall not be liable to the Customer or to any Third Party for any special, indirect or consequential damages of any kind arising directly or indirectly from the use of or inability to use AssetWorks Products described in this Agreement including any claim for lost revenue, profit, data, privacy, security, interruption or loss of service or use of the products, or any loss of business even if AssetWorks has been advised of the possibility of such damages.

54. AssetWorks shall not be responsible for any claims, damages, costs or losses whatsoever arising out of or in any way related to Licensee's connection to or use of the internet.

55. AssetWorks will not be liable to the Customer or any third party for any claims, expenses, damages, costs or losses whatsoever arising out of or in any way related to the Customer/Customer use of:

a. Map or geographical data, owned by the Customer/Customer or any third party, in conjunction with the Software or otherwise; or

b. AssetWorks Software to store, transmit, display, disclose or otherwise use data or information which is considered private, confidential, proprietary or otherwise exempt from public disclosure under applicable law.

56. AssetWorks' entire liability and responsibility for any claims, damages, costs or losses whatsoever arising either jointly or solely from or in connection with this Agreement or the use of the Software (whether or not in the manner permitted by this Agreement), including claims for breach of contract, tort, misrepresentation, or otherwise, or the development, modification or maintenance of the Software will be absolutely limited to the amount of the fees paid by the Customer in the 12 months preceding the date on which the claim arose.

General Indemnification

57. Each Party shall indemnify and hold the other harmless from any claim or action including reasonable expenses and lawyer's fees incurred by a party in the defense or settlement for any injury or damage to persons or property arising out of the negligent acts or omissions of the other. In the case of such joint or concurrent negligence of the parties giving rise to a claim or loss against either one or both, each shall have full rights of contribution from the other.

58. The Customer shall indemnify and hold AssetWorks harmless from any claim or action relating to the Customer's failure to comply fully with any of the provisions of the Safety Section of this Agreement or AssetWorks' Installation Guide or for any claim related to the provision by the Customer of any equipment which is not safe as it is intended to be used. The Customer shall settle at its own expense or undertake at its own expense the defense of any such action including appeals, against AssetWorks.

59. Each party shall promptly notify the other in writing of the notice or assertion of any claim, demand, lien, encumbrance, judgment, award, suit, action or other proceeding arising from the performance of this agreement.

60. AssetWorks will defend, or at the Customer's option cooperate in the defense of, hold harmless and indemnify, including legal fees, the Customer and Customer personnel from third party claims that AssetWorks' Products or Services infringe the intellectual property rights of a third party. This indemnity shall survive the termination of this License however terminated. The Licensed Products of ASSETWORKS' LICENSORS, the Third Party Software suppliers identified in this Agreement, are specifically excluded from this INDEMNIFICATION.

61. In addition, if such a claim is or is likely to be made, AssetWorks will, at its own expense, exercise the first of the following remedies that is practicable: a. obtain for the Customer the right to continue to use and sell the Products consistent with this Agreement; b. modify the Products so they are non-infringing and in compliance with this Agreement; c. replace the Products, or other affected Products, with non-infringing ones that comply with this Agreement; d. at the Customer's request, accept the cancellation of infringing Products without the Customer having any cancellation liability and the return of the infringing Products at AssetWorks' expense and refund any amount paid.

62. The Customer will give AssetWorks prompt notice of third party claims against the Customer, and cooperate in the investigation, settlement and defense of such claims.

Disputes

63. Except as otherwise provided in this Agreement, any dispute concerning a question of fact arising under or related to this Agreement, shall be decided in accordance with the following steps.

a. Notice of Dispute. All disputes shall be initiated through a written dispute notice submitted by either party to the other party within 10 (ten) days of the determination of the dispute.
b. Negotiation Between Executives. The parties shall attempt in good faith to resolve any dispute arising out of or relating to this Contract promptly by negotiation between executives who have authority to settle the controversy and who are at a higher level of management than the persons with direct responsibility for administration of this Contract. Within 14 (fourteen) days after delivery of the dispute notice, the receiving party shall submit to the other party a written response. No

party may use, either directly or indirectly, any information or documents obtained through the dispute resolution process for any other purpose than in an attempt to settle the dispute. If the matter has not been resolved by these persons within forty-two (42) days of the dispute notice, the dispute may be referred to more senior executives of both parties who have authority to settle the dispute and who shall likewise meet to attempt to resolve the dispute.

64. Arbitration. If the Parties agree any dispute may be decided by arbitration in which case the American Arbitration Association shall apply. The venue for Arbitration shall be Chester County, PA. The Parties may agree that the decision of the arbitrator shall not be binding and either party shall have the right to remedies provided by law. The costs of any court action will be the responsibility of each Party.

Termination of Agreement

65. Either party may terminate this Agreement on written notice in the event of a material breach by the other party that remains uncured for a period of thirty (30) days from the date of notice to cure, provided that in the event of a breach of the scope of the licenses granted the cure period shall be fifteen (15) days.

66. Either party may terminate this Agreement on written notice in the event the other party ceases to do business in the ordinary course, makes a general assignment for the benefit of creditors or commences or has commenced against it any insolvency, receivership or bankruptcy proceedings to the extent permitted by law.

67. In the event of termination of the Agreement for any reason, the Customer shall return, or at AssetWorks' discretion destroy, all plans, papers, notes, writings, samples, materials, models and other documents and software and shall refrain from using any portion of it and pay all outstanding balances within thirty (30) days. If Customer terminates this Agreement for reasons other than material breach, a Service Termination Fee equal to 100% of the current Monthly Service Fees will apply and continue to be billed monthly until the end of the then current Term of this Agreement.

68. In the event of termination of this Agreement AssetWorks will:

a. Stop work and the Service;
b. Prepare and submit to the Customer an itemization of all completed and partially completed Products and Services;
c. Deliver to the Customer Products satisfactorily completed up to the date of termination at the agreed upon prices; and
d. Deliver upon request any work in progress.

69. In the event this Agreement is terminated, AssetWorks will make available to the Customer a file of the Customer's Data within 30 days of termination if the Customer so requests at the time of termination. AssetWorks will provide the Customer's Data in comma delimited format. Upon termination for breach, the Customer's right to access or use the Customer's Data immediately ceases, and AssetWorks will have no obligation to maintain or forward any of the Customer's Data.

Contract Documents and Order of Precedence

70. The complete contract between the parties consists of the following documents: a. This Agreement; b. AssetWorks' Online Hardware Warranty; c. AssetWorks' Online Fleet Maintenance and System Support Services Description; d. AssetWorks' Online Return Materials Authorization Instructions. In the event of any conflict of terms between these documents this Agreement shall prevail followed in descending order of precedence by the remaining documents listed.

71. The Parties agree that any terms and conditions inconsistent with this Agreement, that may be preprinted or attached to a quote, purchase order, acknowledgement, or any other document that the Parties may use for the ordering and delivery of Products under this Agreement will not apply and each Party rejects all such terms and conditions.

Miscellaneous Provisions

72. This Agreement shall be binding on the Parties, their successors, and assigns. Neither party shall assign or subcontract its rights or obligations under this Agreement without prior written permission of the other party, and no such assignment or subcontract will be effective until approved in writing by the other party.

73. This Agreement may only be amended by written instrument signed by AssetWorks and the Customer.

74. If any clause or provision of this Agreement is declared to be invalid by any court of competent jurisdiction, then and in that event, the remaining provisions of the Agreement shall remain in force.

75. All notices, invoices and other documents under this agreement shall be made in writing and deemed to have been given upon:

(1) personal delivery, (ii) the fifth business day after mailing, (iii) the second business day after sending by confirmed facsimile, or
(2) the first business day after sending by email (provided email shall not be sufficient for notice of termination or an indemnifiable claim).

Governing Law

76. The Law of the State of Delaware shall apply to this Agreement. The United Nations Convention on Contracts for the International Sale of Goods will not apply to this Agreement.

AssetWORKS

ASSETWORKS MASTER SaaS AGREEMENT

The AssetWorks SaaS Master Agreement ("Agreement") is between the entity ("Customer") stated on the Order Form ("Order Form"), and AssetWorks LLC ("AssetWorks"). It consists of the terms and conditions listed below, as well as the details on the Order Form (together, the "Agreement"). It is effective on the date this Agreement is signed by both parties ("Effective Date").

The Order Form is subject to the following terms and conditions unless Customer has a separate written and signed agreement with AssetWorks. Your right to use the products and services is conditioned upon acceptance of this Agreement.

These terms shall apply to the products, software and services on the Order Form as applicable.

1. AGREEMENT OVERVIEW

AssetWorks provides cloud based services through a Data Center ("Data Center") and provides associated services to support customers that wish to outsource the operation and maintenance of computer applications listed in the Order Form.

This Agreement describes the services to be provided by AssetWorks ("Services") the respective responsibilities of the parties, the service level objectives ("SLOs"), and the problem management process. This Agreement incorporates the following Attachments that shall be considered an integral part of this Agreement:

- Attachment 1 Scope of Services
- Attachment 2 Service Level Objectives
- Attachment 3 Professional Services

Subject to the terms and conditions of this Agreement, and only during the Term (as defined in the Term Section), Customer is granted a non-exclusive, non-transferable, restricted license to use the Software in its own business. Customer has no right to use the Software in processing work for third parties. Use of the Software is subject to the license limitation as stated in the Order Form. Enterprise Pricing is based upon Customer's estimated asset count at the time of this Agreement. Pricing under this Agreement is subject to increase in the event Customer merges with another entity, is subject to a change in control or should Customer's asset count increase.

2. SERVICES

AssetWorks will perform the services ("Services") as described in the Scope of Services, set forth in Attachment 1.
The general scope of services addressed by this Agreement includes the operation, maintenance, and support of the:

- Database software for the Applications hosted under this Agreement
- Database security
- Data Center server operation

The scope of services specifically excludes operation and maintenance of the following:

- Customer hardware, including Customer's servers, printers, network hardware (including routers and switches) and other Customer site computing equipment;
- Customer application software other than noted in the Scope of Services; and
- Customer Local Area Networks ("LAN")
- Customer network infrastructure for connecting to the Internet and to the AssetWorks Data Center

The Services shall be provided subject to the Terms and Conditions, which follow.

3. TERM

The Term of the Agreement shall commence as of the Effective Date and shall continue for five (5) years ("Initial Term") unless terminated earlier as set forth below. At the end of the Initial Term, the Agreement shall automatically renew for successive one-year terms unless or until either party provides the other party with written notice of non-renewal at least ninety (90) days prior to the end of the then current term.

4. FEES AND PAYMENT

For recurring Services, unless otherwise stated in the Order Form, AssetWorks shall invoice Customer in advance. All invoiced fees shall be due and payable within 30 days of the date of an invoice. For Professional Services, invoices shall be sent either monthly or upon completion of milestones (as defined in the Statement of Work or on the Order Form) and include charges defined in the Order Form unless otherwise specifically stated in the Order Form. All payments shall be made in United States Dollars without deduction for any taxes or withholding or other offset.
Any amounts not paid when due will be subject to interest accrued, which interest will be immediately due and payable from the due date for payment until the date of actual receipt of the amount in cleared funds by AssetWorks, at the lesser of (a) 1.5% per month, or (b) the highest rate under applicable law.
Customer will be considered delinquent if payment in full is not received 45 days from the date of the invoice. AssetWorks reserves the right to suspend or terminate this Agreement and Customer access to the Service if the Customer account becomes delinquent and is not cured within 10 days of notice of non-payment. Customer will continue to be charged and hereby agrees to pay for Service during any period of suspension. Customer's failure to pay any invoice after this 10 day period shall constitute a material default hereunder and shall entitle AssetWorks to exercise any and all rights and remedies provided herein or at law including a suspension of Services under

the Agreement. If Customer or AssetWorks initiate termination under any provision of the Agreement other than under the Termination for Default Section, Customer will be obligated to pay the balance due for the remainder of the term for its account computed in accordance with the Order Form. Customer agrees that it shall be billed for such unpaid fees. In the event of a dispute between the parties that does not result in a termination of the Agreement, Customer agrees to make all payments due under the Agreement pending the resolution of the dispute.

5. TAXES

Except as otherwise specified the prices stated do not include any state, federal, or local sales, use or excise taxes, duties, or brokerage fees now in force or which may be enacted in the future, and may be applicable to the sale, delivery, or use of products and Services supplied by AssetWorks. Unless the Customer provides a valid tax exemption certificate and in the event Customer's tax exemption status changes, Customer expressly agrees to pay to AssetWorks, in addition to the prices stated, the amount of any such taxes which may be imposed upon or payable by AssetWorks.

In no event whatsoever shall AssetWorks be liable for sales, use, business, gross receipts or any other tax that may be levied by any State or Federal Government entity against a contractor to such governmental entity other than taxes upon income earned by AssetWorks for the goods and/or Services provided pursuant this Agreement. This exclusion of tax liability is also applicable to any goods and/or Services that may be provided by AssetWorks under any later Order Form or amendment hereto regardless of changes in legislation or policy.

In the event a taxing authority conducts an audit of this Agreement and determines that an additional tax should have been imposed on the Services or Deliverables provided by AssetWorks to Customer (other than those taxes levied on AssetWorks income), Customer shall reimburse AssetWorks for any such additional tax, including interest and penalties thereon. Similarly, if a taxing authority determines that a refund of tax is due as it relates to the Services or Deliverables provided by AssetWorks to Customer (except those taxes relating to AssetWorks income), AssetWorks shall reimburse Customer such refund, including any interest paid thereon by the taxing authority.

6. CUSTOMER RESPONSIBILITIES

The Customer is responsible for:

- Assigning a primary and alternate Customer representative (designated key personnel) to coordinate all communications and activities related to AssetWorks services.
- Providing user identification data and determining the appropriate security profile for each user. Customer will control security at the Application level.
- All printing. No print job will print at the Data Center and all physical printing requirements will be handled by the Customer.
- The purchase and installation of printers at Customer's sites for the Application being utilized as defined in the Scope of Services.
- Installation, operation and maintenance of all workstation software (and Customer's LAN, existing data communications configuration, hardware, or software required at the Customer's site except as otherwise stipulated in the Scope of Services. AssetWorks network and network responsibility extends from the AssetWorks routers at AssetWorks' sites to all connected equipment at AssetWorks' sites.
- Testing updates and fixes applied by AssetWorks to Applications used by Customer. With the exception of emergency fixes, Customer will test updates and fixes prior to their introduction to the Production environment within a mutually agreed upon time frame.
- Testing upgrades. Upgrades will be moved to production by the AssetWorks at the end of the Customer testing period unless specific problems are documented in writing to AssetWorks.
- Diligent analysis of suspected problems to determine their specific nature and possible causes before calling the AssetWorks for assistance. Notwithstanding this diligence requirement, Customer is responsible for informing AssetWorks of any problems encountered in a timely manner.

7. CONFIDENTIAL INFORMATION

"Confidential Information" means all information disclosed by either party to the other party, whether orally or in writing, that the other party should reasonably understand to be confidential. Each party will maintain all Confidential Information in confidence and will use it solely in the discharge of its obligations under this Agreement and any applicable Statement of Work. Nothing herein will be deemed to restrict a party from disclosing Confidential Information to its employees and subcontractors in the discharge of such obligations.

Confidential Information will not include information that (i) is, or becomes, generally known or available through no fault of the, recipient; (ii) is known to the recipient at the time of its receipt from the disclosing party; (iii) the disclosing party provides to a third party without restrictions on disclosure; (iv) is subsequently and rightfully provided to the recipient by a third party without restriction on disclosure; (v) is independently developed by the recipient, without reference to the disclosing party's Confidential Information; or (vi) is required to be disclosed pursuant to a governmental agency or court subpoena, provided the recipient promptly notifies the disclosing party of such subpoena to allow it reasonable time to seek a protective order or other appropriate relief.

Because of the unique nature of the Confidential Information, each party agrees that the disclosing party may suffer irreparable harm in the event the recipient fails to comply with its obligations under this Section, and that monetary damages may be inadequate to compensate the disclosing party for such breach. Accordingly, the recipient agrees that the disclosing party may, in addition to any other remedies available to it, be entitled to injunctive relief

8. INTELLECTUAL PROPERTY

Customer and AssetWorks shall each retain ownership of, and all right, title and interest in and to, their respective pre-existing Intellectual Property. The Services performed, code developed and any Intellectual Property produced pursuant to this Agreement ("Developments") are not "works for hire," or any similar concept throughout the world, and AssetWorks is the sole owner of all right, title and interest in such Developments. If for any reason any Developments may be considered "works made for hire" and/ or there are any rights in the Developments that accrue to the Customer, then the Customer hereby irrevocably assigns and agrees to assign any and all of rights, title and interest thereto, whether now known or hereafter defined or discovered, to AssetWorks and the Customer agrees to take such further

action, including executing such instruments and documents as AssetWorks may reasonably request, to evidence such assignment. As used herein, "Intellectual Property" shall mean inventions (whether or not patentable), works of authorship, trade secrets, copyright, techniques, know-how, ideas, concepts, algorithms, and other intellectual property incorporated into any Statement of Work or Deliverable whether or not first created, discovered, or developed by AssetWorks in providing the Services.

9. WARRANTY DISCLAIMER/LIMITATION OF LIABILITY

Except as expressly set forth herein, AssetWorks disclaims all warranties express or implied relating to the services or deliverables provided hereunder, including but not limited to any warranty of fitness for a particular purpose or merchantability. AssetWorks shall not be liable for any punitive, indirect, incidental, special or consequential damages, including but not limited to lost data or lost revenues or profits, however arising, even if AssetWorks has been advised of the possibility of such damages. AssetWorks' liability for any and all damages (including attorneys' fees) arising from or relating to this Agreement (whether arising in breach of contract or warranty, tort, strict liability, statutory liability or otherwise) shall in no event exceed fees paid to AssetWorks under this Agreement during the previous 12-month period. The parties acknowledge and agree to the foregoing liability risk allocation. Any claim by Customer against AssetWorks relating to this agreement must be made in writing and presented to AssetWorks within six (6) months after the date on which this Agreement expires or is otherwise terminated.

10. TERMINATION FOR DEFAULT

A Default shall occur if:

(1) a party fails to perform any of its material obligations under the Agreement and such failure remains uncured for 30 days after receipt of written notice thereof; or

(2) a party ceases to conduct business, becomes or is declared insolvent or bankrupt, is the subject of any proceeding relating to its liquidation or insolvency which is not dismissed within 90 days or makes an assignment for the benefit of creditors.

If Default occurs, the non-defaulting party, in addition to any other rights available to it under law or equity, may withhold its performance hereunder, terminate Customer access to the Service, or may terminate the Agreement by written notice to the defaulting party. Unless otherwise provided in the Agreement, remedies shall be cumulative and there shall be no obligation to exercise a particular remedy.

11. NONSOLICITION

During the term of this Agreement, and for 1 year thereafter, Customer shall not solicit the employment of, or contract for the Services of, any person who is/was an employee, agent, or subcontractor of AssetWorks during the term of this Agreement. Nothing in this section shall prohibit Customer from placing a bona fide public advertisement for employment which is not specifically targeted at AssetWorks employees and Customer shall not be restricted from hiring any such person who responds to any such general solicitation or public advertisement so long as no direct solicitation of such person has occurred.

12. GOVERNING LAW; VENUE

Unless prohibited by law, this Agreement shall be governed and construed in accordance with the laws of the State of New York without regard to choice of law principles. Unless prohibited by law, the parties agree that the sole jurisdiction and venue for actions related to the subject matter hereof shall be the state and U.S. Federal courts in the State of Pennsylvania and both parties consent to the jurisdiction of such courts and waive any objections regarding venue in such courts.

13. ASSIGNMENT

Neither the Agreement nor any duties or obligations hereunder shall be assigned or transferred by Customer without the prior written approval of AssetWorks, which approval may be withheld in the reasonable judgment of the AssetWorks. Customer agrees that AssetWorks may assign its obligations in the event of a reorganization, but AssetWorks shall remain responsible for performance under the Agreement. All fees will remain intact as outlined in the Order Form throughout the Initial Term.

14. SEVERABILITY

If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any manner.

15. ENTIRE AGREEMENT

The Agreement and any schedules and exhibits thereto contain the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes and replaces any and all prior or contemporaneous proposals, discussions, agreements, understandings, commitments, representations of any kind, whether oral or written, relating to the subject matter hereof or the Services to be provided hereunder.

16. FORCE MAJEURE

Neither party shall be liable for any failure of or delay in performance of its obligations (except for payment obligations) under this Agreement to the extent such failure or delay is due to acts of God, acts of a public enemy, fires, floods, power outages, wars, civil disturbances, sabotage, terrorism, accidents, insurrections, blockades, embargoes, storms, explosions, labor disputes (whether or not the employees' demands are reasonable and/or within the party's power to satisfy), failure of common carriers, Internet Service Providers (or ISPs), or other communication devices, acts of cyber criminals, terrorists or other criminals, acts of any governmental body (whether civil or military, foreign or domestic), failure or delay of third parties or governmental bodies from whom a party is obtaining or must obtain approvals, authorizations, licenses, franchises or permits, inability to obtain labor, materials, power, equipment, or transportation, or other circumstances beyond its reasonable control (collectively referred to herein as "Force Majeure Occurrences"). Any such delays shall not be a breach of or failure to perform this Agreement or any part thereof and the date on which the obligations hereunder are due to be fulfilled shall be extended for a period equal to the time lost as a result of such delays. Neither party shall be liable to the other for any liability claims, damages or other loss caused by or resulting from a Force Majeure Occurrence.

17. WAIVER

No provision of the Agreement may be waived unless in writing, signed by both of the parties hereto. Waiver of default of any provision of the Agreement shall not operate or be construed as a waiver of any subsequent default of such provision, nor shall a waiver of any one provision of the Agreement be deemed to be a waiver of any other provision.

18. AMENDMENTS, SUPPLEMENTS
The Agreement may be amended or supplemented only by the mutual written consent of the parties' authorized representative(s).

19. BINDING EFFECT, BENEFITS
The Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns. Notwithstanding anything contained in the Agreement to the contrary, nothing in the Agreement, expressed or implied, is intended to confer on any person other than the parties hereto or their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of the Agreement.

20. NOTICES
All notices under the Agreement will be in writing and will be delivered by personal service, certified mail, postage prepaid, or overnight courier to such address as may be designated from time to time by the relevant party, which initially shall be the addresses set forth at the top of this Agreement. Any notice sent by certified mail will be deemed to have been given five (5) days after the date on which it is mailed.

21. HEADINGS
The Section headings in the Agreement are inserted only as a matter of convenience, and in no way define, limit, or extend or interpret the scope of the Agreement or of any particular Article or Section.

22. AUTHORIZATION
Each of the parties represents and warrants that the Agreement is a valid and binding obligation enforceable against it and that the representative executing the Agreement is duly authorized and empowered to sign the Agreement.

23. RELATIONSHIP OF PARTIES
The relationship of the parties shall at all times be one of independent contractors. Nothing contained herein shall be construed as creating any agency, partnership or other form of joint enterprise between the parties.

24. CONFLICTING PROVISIONS
This Agreement and the Order Form are intended to be read and construed in harmony with each other, but in the event any provision in any attachment conflicts with any provision of this Agreement, then the terms on the Order Form shall be deemed to control, and such conflicting provision to the extent it conflicts shall be deemed removed and replaced with the governing provision therein. Terms on a Customer invoice which are intended to add additional or conflicting terms to this Agreement are specifically rejected and do not become part of the Agreement unless incorporated onto the Order Form.

25. COUNTERPARTS
The Order Form may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

26. COUNSEL
By execution of the Order Form, each of the Parties acknowledges and agrees that it has had an opportunity to consult with legal counsel and that it knowingly and voluntarily waives any right to a trial by jury of any dispute pertaining to or relating in any way to the transactions contemplated by the Agreement, the provisions of any federal, state or local law, regulation or ordinance notwithstanding.

AssetWorks LLC	**Customer**
Name:_____	Name: _____
Title: _____	Title: _____
Sign:_____	Sign: _____
Date:_____	Date:_____

Attachment 1 - Scope of Services

All of the services, functions, processes, and activities described below will be collectively described as the "Services" for purposes of this Agreement.

Application
Application refers to the software provided by AssetWorks pursuant to this Agreement.

Support Software
Support Software includes the operating system, utilities, database software, and all necessary licenses required to operate the Application and provided by AssetWorks as part of the Services.

Hardware
Server infrastructure.

Database Instances
AssetWorks will maintain a single Production Database instance. This Production Database will provide the daily, real-time transaction data to the Application users.
In addition to the Production Database, AssetWorks will maintain one additional, non-production Database (Test). Upon request by Customer, AssetWorks will populate these additional Databases with Customer's Production data up to 4 times in any 12 month period at no additional cost.

Backups
Full database and incremental file system backups are taken each night and stored at an offsite facility. Backup data is retained for 14 days.

Hours of System Operations
The Application will be accessible and available to the Customer and capable of any and all normal operating functions 24 hours a day, seven days a week except for periods of Scheduled Maintenance and previously approved outages. AssetWorks will not be held responsible for inaccessibility arising from communications problems occurring anywhere beyond the AssetWorks side of the router resident at the Data Center, nor will these hours of unavailability be counted as unavailable.

Data Center Maintenance
AssetWorks will complete routine maintenance on the Application according to the published schedule. AssetWorks will publish schedules for subsequent years on its Customer Support web site. AssetWorks will provide at least 30 days notice to any changes in the schedule.
If AssetWorks is required to perform additional maintenance outside of the Scheduled Maintenance window, it will notify the Customer in writing of its request. The Customer and the AssetWorks will mutually agree on the downtime, which will then be considered a period of Scheduled Maintenance.

Application Maintenance
1. Correction of Deviations

In the event that the Customer encounters an error and/or malfunction ("Deviation") in the Software, the Customer shall communicate the circumstances and any supporting information to AssetWorks. Upon receipt, AssetWorks will respond as follows:

a. In the event that, in the mutual and reasonable opinion of AssetWorks and Customer, there exists a Deviation that does not constitute a serious impediment to the normal intended use of the Software, AssetWorks will correct the Deviation and distribute the correction in accordance with AssetWorks' normal Software revision schedule.

b. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer, there exists a Deviation that does constitute a serious impediment to the normal intended use of the Software, AssetWorks will take such steps as are required to correct the Deviation with all due dispatch. Corrections will be applied and distributed to the latest software release. AssetWorks will have no obligation to provide development support for an issue that can be resolved by Customer installing a revision to the software.

2. Software Revisions

The Software may be revised by AssetWorks as a result of the correction of Deviations and/or the release of upgrades or improvements or modifications designed to improve the performance of the Software and/or to increase the capabilities of the Software (hereafter "Revisions").

3. Telephone Hotline Assistance

AssetWorks shall make available technically qualified personnel to respond to all reasonable telephone requests, Monday through Friday, excluding State holidays, during normal business hours, that may be made by the Customer relating to the application and operation of the Software. At other times such personnel are available by beeper for emergencies.

4. Technical Literature

AssetWorks shall make available to the Customer on line all technical literature that is considered by AssetWorks to be relevant to the Software and its use within the scope of Customer's operations.

5. Proper Use

a. The Customer agrees that all reasonable effort shall be taken to ensure that neither the Software nor data files are misused.

b. In the event that the Customer or its agents misuses the Software or data files, including, but not limited to, inserting, updating, deleting or otherwise modifying data through a means other than the Software, although AssetWorks is not obligated to correct such misuse, AssetWorks shall be entitled to attempt to correct the situation, if possible, at Customer's expense.

c. In the event that diagnostic assistance is provided by AssetWorks, which, in the reasonable opinion of AssetWorks and the Customer, relates to problems not caused by a Deviation in the Software, such assistance shall be at the Customer's expense.

Attachment 2 - Service Level Objectives

This Service Level Agreement ("SLA") is intended to provide an understanding of the level of service to be delivered by AssetWorks for the Services specified in Attachment 1. The service levels set forth below apply to the Services provided by AssetWorks under the Agreement.

AVAILABILITY

AssetWorks will use commercially reasonable efforts to provide Services with an average of 99% Availability (as such term is hereinafter defined) for each quarter during the Term. For purposes of the Agreement, "Availability" during any quarter refers to an Authorized User's ability to log into the Application during such quarter, and will be calculated in accordance with the following formula:
x = (y - z) / y * 100

Where,

- "x" is the Availability of the Application during the quarter;
- "y" is the total number of hours in such quarter minus the number of hours during such quarter that the Customer is unable to log into the Application because of (a) regularly scheduled maintenance windows for the Application and for times in which Customer has been notified in writing (including e-mail) by AssetWorks in advance thereof; (b) a Force Majeure Event; (c) non-performance of hardware, software, ISP connections, and other equipment that is not provided by AssetWorks or certified by AssetWorks for use in conjunction with the Services (except as such non-performance is directly or indirectly caused by AssetWorks).
- "z" is the number of hours in such month during which the Customer is unable to log into the Application (other than for reasons set forth in the definition of "y" above); provided that AssetWorks has been notified or is otherwise aware (or reasonably should be aware) of Customer's inability to utilize the Application.

FEE ADJUSTMENT

In the event that AssetWorks does not meet the Availability levels set forth below, the amount of fees payable by Customer will be reduced as follows:
In the event the average Availability for the Application is less than ninety nine percent (99%) during any two consecutive quarters, Customer will receive a credit to its account with AssetWorks of five percent (5%) of the amount of a quarter's aggregate Services Fees paid or payable by Customer to AssetWorks.
AssetWorks' obligation to provide Customer with fee adjustments as set forth above is conditioned on Customer providing detailed written notice to AssetWorks of its contention that AssetWorks was unable to meet the applicable Availability levels. Upon receipt of such notice, AssetWorks shall have thirty (30) calendar days to investigate the contention. If, at the end of the thirty (30) calendar day period it is determined that AssetWorks did in fact fail to meet the applicable Availability levels, Customer will receive the appropriate credit to its account during the next invoice cycle.
The remedies set forth in this Section of this Attachment shall be Customer's sole remedy and AssetWorks' entire liability in the event of a breach of this Attachment 2, including the failure of any Availability measurements to meet the thresholds set forth above.

Attachment 3 – Professional Services Terms

1. Services / Statement of Work. AssetWorks will perform the Professional Services ("Services") described in the Statement of Work and/or Order Form ("Statement of Work"). The terms of this Attachment shall control any additional or future Statements of Work that may be executed by the parties during the Term of the Agreement. No Statement of Work shall be of any force and effect unless and until executed by both AssetWorks and Customer.

2. Price and Payment Term
   a. Each Statement of Work will either be on a time and material basis or a fixed price basis, specified in the Statement of Work. The Statement of Work may or may not include a definitive list of "Deliverables" that must be completed by AssetWorks. In some instances, the Statement of Work will include a date by which "Deliverables" must be completed.
   b. In the event that Services result in greater AssetWorks duties than contemplated by the Statement of Work, Customer will work closely and in good faith with AssetWorks to modify the Statement of Work to ensure that the Customer's requirements are addressed and AssetWorks' fees shall be adjusted to reflect increased Customer requirements.
   c. Unless specifically addressed in the Statement of Work, all travel and expenses incurred will be extra and billed at the time of incurrence.
   d. Invoiced amounts are due and payable 30 days from the date of the invoice. The preferred means of payment is by electronic funds transfer (EFT). EFT payments can be accomplished as either a Funds Transfer (Fed Wire) or Direct Deposit (ACH).
   e. Custom modules, interfaces and other Software can be placed under the AssetWorks Software Maintenance program.
   f. Bill to Address. The invoice will be mailed to the Customer address on the Order Form unless otherwise indicated in the Statement of Work.

3. Resources to be Provided by Customer
   a. Customer shall provide, maintain and make available to AssetWorks, at Customer's expense and in a timely manner, the resources described in this Section, the Statement of Work, and such other additional resources as AssetWorks may from time to time reasonably request in connection with AssetWorks performance of the Services. Delays in the provision of these resources may result in delays in the performance of the Services, or an increase in the Price.

b. Customer will designate qualified Customer personnel or representatives to consult with AssetWorks on a regular basis in connection with the Services. Customer will furnish such documentation and other information as is reasonably necessary to perform the Services.
c. Customer shall furnish access to Customer's premises, and appropriate workspace for any AssetWorks personnel working at Customer's premises, as necessary for performance of those portions of the Services to be performed at Customer's premises.
d. Customer shall meet all assumptions noted on the Statement of Work.

4. Subcontractors. AssetWorks may engage subcontractors to assist in performing Services without the prior written consent of Customer; provided, AssetWorks shall supervise such sub-contractors and the Services performed by them to the same extent as if AssetWorks performed the work.

5. Termination for Default. Either party may terminate any Statement of Work if (i) the other party fails to perform a material obligation of the Statement of Work and such failure remains uncured for a period of 30 days after receipt of notice from the non-breaching party specifying such failure; or (ii) a party ceases to conduct business, becomes or is declared insolvent or bankrupt, is the subject of any proceeding relating to its liquidation or insolvency which is not dismissed within 90 days or makes an assignment for the benefit of creditors. In addition, AssetWorks may terminate any Statement of Work effective immediately upon written notice to Customer if Customer fails to make any payment in full as and when due hereunder. Termination of a Statement of Work shall not terminate this Agreement.
Upon termination for whatever reason and regardless of the nature of the default (if any), Customer agrees to pay AssetWorks the full value for all goods and/or Services provided to Customer up to and including the date of termination. For avoidance of doubt, where AssetWorks has not yet completed a milestone documented on the Statement of Work and this agreement is terminated for whatever reason and regardless of the nature of the default (if any), Customer shall pay to AssetWorks for the work completed up to and including at the time of termination.

6. Termination for Convenience. Notwithstanding any other provision in this Agreement, either party may terminate a Statement of Work by providing a 90 day notice of intent to terminate the Statement of Work.

7. Effect of Termination. The Terms of this Agreement shall survive for any Statement of Work which is still pending at the time of termination until the conclusion of the Statement of Work.

8. Professional Services Limited Warranty
a. AssetWorks warrants that the Deliverables provided under an Order Form or a Statement of Work authorized under this Attachment shall be performed with that degree of skill and judgment normally exercised by recognized professional firms performing the same or substantially similar Services. In the event of any breach of the foregoing warranty, provided Customer has delivered to AssetWorks timely notice of such breach as hereinafter required, AssetWorks shall, at its own expense, in its discretion either (1) correct the non-conforming Deliverables to conform to this standard; or (2) refund to Customer that portion of the Price received by AssetWorks attributable to the non-conforming Deliverables. No warranty claim shall be effective unless Customer has delivered to AssetWorks written notice specifying in detail the non-conformities within 90 days after tender of the non-conforming Deliverables. The remedy set forth in this Section (a) is the sole and exclusive remedy for breach of the foregoing warranty.
b. ASSETWORKS SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED STANDARDS, GUARANTEES, WARRANTIES OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, AND ANY WARRANTIES THAT MAY BE ALLEGED TO ARISE AS A RESULT OF CUSTOM OR USAGE, ANY WARRANTY OF ERROR-FREE PERFORMANCE, OR ANY WARRANTY OF THIRD PARTY PRODUCTS, OR FUNCTIONALITY OF THE CUSTOMER'S HARDWARE, SOFTWARE, FIRMWARE, OR COMPUTER SYSTEMS.
c. Customer represents and warrants to AssetWorks that Customer has the right to use and furnish to AssetWorks for AssetWorks use in connection with this Agreement any information, specifications, data or Intellectual Property that Customer has provided or will provide to AssetWorks in order for AssetWorks to perform the Services and to create the Deliverables identified in the Statement of Work.

9. Relationship of Parties. AssetWorks is an independent contractor in all respects with regard to any Professional Services. Nothing contained in this Agreement shall be deemed or construed to create a partnership, joint venture, agency, or other relationship other than that of contractor and Customer.

THIS CHANNEL DISTRIBUTOR MASTER SERVICES AGREEMENT is made on February ____, 2021 ("Effective Date") between and among Verizon Connect Inc., a Delaware Corporation with a business address at 2002 Summit Blvd, Suite 1800, Atlanta, Georgia 30319, on behalf of itself and its affiliates Verizon Connect Telo Inc., Networkfleet, Inc., and Verizon Connect Fleet USA LLC (collectively, "Verizon"): and AssetWorks LLC, having an office at 998 Old Eagle School Road, Suite 1215, Wayne, PA 19087 ("Distributor"), each a "Party" and referred to collectively as the "Parties. The "Agreement" means the terms and conditions set forth in this Master Services Agreement for Verizon Connect Reveal and other content, including exhibit(s), appendices, and addenda referenced in or attached hereto.

1 Verizon Products and Services

1.1 **Products and Services.** This Agreement enables Distributor to sell, deploy, operate and support the Verizon Products and Services subject to the payment of fees (including subscription fees) and charges as described in Exhibit D in the Territory described in Exhibit C.

1.2 **Distribution of Verizon Services.** Using this Agreement, Distributor (as defined below) may order products and services from Verizon (collectively referred to as "Verizon Services" or "Services") for the purpose of being distributed and provided by the Distributor to the government Service subscribers ("Customer"). Customers do not include, for the purposes of the Services set forth herein, commercial fleets unless or until Verizon receives, reviews and approves an exception.

1.2.1 For each Customer who desires to purchase Verizon Service(s) through Distributor, Distributor will submit a Service Order under this Agreement for such Service(s). The initial form of such Service Order is attached hereto as Exhibit A. The form of Service Order may be updated by Verizon from time to time. Any such Service Order which includes products, products bundles, or services which differ from those in Exhibit D requires Verizon's advance written agreement, which may be provided by Verizon's execution of such Service Order. No Service Order which incorporates or includes any terms other than those in this Agreement will be effective unless executed by Verizon. In case of conflict between the terms of this Agreement and the terms contained in a Service Order, the terms of this Agreement shall prevail, except when the Service Order executed by both Parties specifically references a provision of this Agreement and expressly states that the terms of the Service Order shall govern.

1.2.2 Distributor may not appoint other resellers or distributors of the Verizon Services or otherwise transfer to any person or entity the right to resell Verizon Services. This Agreement does not commit Verizon to provide any Verizon Services other than those described in Exhibit D or as agreed between the Parties under a duly executed Service Order.

1.2.3 Distributor is authorized under this Agreement to distribute Services to Customers in the geographies listed in Exhibit C ("Territory"). Distributor acknowledges that certain Verizon Services may not be available in all countries.

1.2.4 If applicable, Distributor shall comply with any registration or other requirements from its customers in order to sell to them any Verizon Service.

1.2.5 Distributor shall ensure that it enters into a written agreement with each of its Customers that includes the terms and conditions set forth in Exhibit F, including if applicable the terms for API Access.

1.2.6 Distributor will make no warranties with respect to any Verizon Service or any equipment or accessory provided by on or behalf of Verizon for use with any Service ("Equipment").

1.2.7 Distributor shall in its sole discretion determine the rates and charges at which it resells the Verizon Services. For avoidance of doubt, nothing in this Agreement or a Service or Purchase Order shall place any obligation on the Distributor with respect to its selling prices for Verizon Services to Customers. Such pricing is entirely at the discretion of the Distributor.

1.2.8 On a quarterly basis, Distributor shall submit to Verizon a list of its then-current customers for the purpose of planning sales activities to such customers.

1.2.9 Distributor agrees that this agreement constitutes a non-exclusive partnership with Verizon, and Distributor will set forth understanding that Verizon may bid directly and in partnership with Distributor or with other partners. Distributor also acknowledges that Verizon may consider expanding the reseller relationship with Distributor to include new products, services and geographies to be listed or modified in Exhibits C and D, respectively.

1.2.10 Verizon agrees that this agreement constitutes a non-exclusive partnership Distributor, and Verizon will set forth understanding that Distributor may bid directly and in partnership with Verizon or with other partners. Distributor shall be permitted to market products that are competitive to Verizon products.

1.2.11 Distributor agrees to add the Verizon Service known as the Reveal product suite, as defined in Exhibit D, to the Distributors GSA schedule. Verizon will cooperate with Distributor to ensure that any Verizon Terms of Service or other terms that are required to be passed through to customers or end user are added to either Distributor or Verizon's GSA schedule contract terms.

1.2.12 Verizon and Distributor agree to collaborate on a program to upgrade and transition Distributor's customers using NetworkFleet to the new Verizon Reveal solution. These activities will include and not be limited to the following:

1.2.11.1 Program that details customers by name, dependencies and time frame for migration.

1.2.11.2 Responsive approach to "at risk" customers.

1.2.11.3 Customer communication materials that detail product capabilities and other relevant transition topics. [1]

[1] Note that nothing in this Agreement shall alter or otherwise modify any terms and conditions of the prior to service agreements with

The parties agree that any such customer will be responsible for any associated transition costs, including without limitation, uninstalling of hardware.

1.3 **RESERVED.**

1.4 **Training and Certification for Verizon Equipment.** Distributor shall be authorized to engage with Customers or potential customers only for the marketing, sale and distribution of designated Services and Equipment for which Distributor has successfully completed training in the sole determination of Verizon ("Training and Certification"). Additional services and Verizon products may become available for Training and Certification from time to time. Verizon agrees to provide training prior to launch of the services described in Exhibit D.

1.5 **Customer Support.** Verizon will provide customer support for the Services as specified in Exhibit E.

1.6 **Telemarketing; Email Campaigns; Mobile Marketing.** All E-mail solicitations in which Services are offered by Distributor shall identify Distributor as the sender of the E-mail solicitation, and the body of any such E-mail solicitation shall be designed in a manner that gives the impression that the E-mail solicitation is being made by Distributor only, and shall be subject to Sections 1.7 and 1.8. Distributor shall not transmit to any mobile number or email address any unsolicited or unauthorized commercial material, including, but not limited to, advertising, promotional materials, "junk mail," "SPAM," chain letters, pyramid schemes, or other undesirable material. Parties may collaborate on supporting marketing materials prior to launch of the services. These may include but are not limited to the following:

1.6.1 Press Release to government publications

1.6.2 Co-branded product marketing brochures

1.6.3 PowerPoint decks for sales use

1.6.4 Product solution demonstration script for sales engineers

1.6.5 Product solution demonstration video

1.6.6 Product solution template used for RFP response by Assetworks

1.6.7 Co-branded internet web site landing page detailing integrated product solution

1.7 **Linking.** Both Parties agree to have integration in place prior to launch, and both parties acknowledge the value of having this as a Customer choice option that will benefit both Parties. If the Parties agree to link their websites, the linking relationship shall be subject to this Agreement together with mutually agreed upon linking guidelines and satisfactory security conditions. Upon termination of this Agreement or notice to cease and desist use of the linking relationship for any reason, the Parties agrees to remove any such links to the other Party's web site within ten (10) Business Days of receiving such notice. For purposes of this Agreement, "Business Day" means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which commercial banks are authorized nor required by law, regulation or executive order to close.

1.8 **Use of Verizon Trademarks.** Subject to the terms and conditions specified in this Agreement and provided that there is no breach, Verizon hereby grants Distributor a limited, nonexclusive license to use Verizon trademarks as provided to Distributor in writing by Verizon solely in connection with the furtherance of the purposes of this Agreement. Prior to any use of the Verizon trademarks by Distributor, Distributor agrees to submit a sample of such proposed use to Verizon for its prior written approval, which shall not be unreasonably withheld or delayed. Once approval is given for a particular use, no approval shall be required for future same uses in the same manner. If Verizon believes that any use by Distributor is inconsistent with its standards and guidelines as provided to Distributor by Verizon, Distributor agrees to promptly cease any such use upon such request by Verizon. Distributor shall strictly comply with all standards and guidelines with respect to the Verizon trademarks as furnished by Verizon and updated from time to time and communicated to Distributor in writing. Distributor acknowledges and agrees that all uses of the Verizon trademarks by Distributor shall inure to the benefit of Verizon. Upon termination of this Agreement or notice to cease and desist use of the Verizon trademarks for any reason, Distributor agrees to cease all use of the Verizon trademarks.

1.9 **Distributor Reviews.** Verizon may verify adherence to the Agreement terms and conditions and related third party provider obligations through reviews ("Distributor Reviews"). Such reviews must be reasonable and relevant, and Distributor shall cooperate with Verizon in conducting the Distributor Reviews and provide requested information.

2 Rates, Orders, Taxes, and Payment

2.1 **Orders.** A contract ("Contract") between Distributor and Verizon is created by way of order ("Service Order" or "Billing Order") and consists of: (a) the Agreement; (b) the relevant Service Order or Billing Order; and (c) other content incorporated by reference by the Service Order or Billing Order or elsewhere.

2.2 **Billing Schedule.** The Services will be billed according to the Billing Schedule in Exhibit D.

2.3 **Rates and Charges.** Distributor shall pay the applicable rates and charges for the Services as set forth in Exhibit D or in an applicable Service Order. Verizon shall be responsible for all shipping charges associated with any zero dollar

transactions, including, but not limited to defective equipment swaps or no charge equipment upgrades.

2.4 **Payment.** Distributor will pay accurate Verizon invoices within thirty (30) days after the invoice date.

2.4.1 **Past Due Amounts.** Amounts not paid or disputed in good faith ("Dispute Amount") on or before thirty (30) days from the later of (a) the invoice date or (b) the date on which the invoice is received will be past due, and interest shall accrue on any past due amount from the due date until payment (whether before or after judgment of such Disputed Amount) at a rate to be determined by Verizon which may not exceed either (a) 1.5% per month or (b) the maximum amount allowed by applicable law. If Distributor's account(s) reflect a credit balance, Distributor must designate, in writing, within such thirty (30) days the account(s) and charges to which such credits are to be applied; Verizon may elect to apply any undesignated credit balance(s) to the account(s) with the oldest unpaid charges. Verizon may invoice Distributor up to six months after the date a charge accrues; for charges invoiced after that, Distributor may request a credit (except that in cases involving fraud or third party charges, charges may be invoiced without the time limitation stated above applying provided that they are invoiced within a reasonable period after Verizon becomes aware of such charges).

2.4.2 **Remedies for Past Due Amounts.** Without prejudice to any other rights under applicable law, Verizon also may terminate this Agreement and/or a contract in accordance with the clauses entitled "Termination Notices" and "Service Suspension" with respect to any Customer with past due amounts greater than 90 days other than Disputed Amounts. Distributor agrees to pay Verizon its reasonable expenses, including legal and collection agency fees, incurred in enforcing its rights under this Agreement or any contract.

2.4.3 **Disputed Amounts.** If Distributor notifies Verizon of a Disputed Amount by email within thirty (30) days of the invoice date the Disputed Amount may be withheld. If Verizon (in its reasonable opinion) determines a Disputed Amount is not valid, then any withheld amount will be considered past due and must be paid (including any accrued interest) within five days of written notification by Verizon to Distributor of that determination or the current due date under the relevant invoice, whichever is the later. If Distributor does not give Verizon written notice of a Disputed Amount with respect to charges or the application of Taxes within ninety (90) days of the date of an invoice, the invoice will be deemed to be correct and binding on Distributor.

2.5 **Service Commitments.** "Service Commitment" means the period of time for which Distributor is committed to pay for a particular Service. A Service Commitment commences on the Activation Date of the Service to which it relates. Upon expiration of the Service Commitment, the Services automatically continue until either Party terminates them under the terms of the Agreement or Service Order.

2.6 **Invoicing and Activation.** Distributor is deemed to have accepted Services on the Activation Date and Verizon will accrue and invoice the charges as follows: (a) recurring charges accrue from the Activation Date and are invoiced in arrears; (b) usage based charges accrue from the Activation Date and are invoiced in arrears; and (c) one time or set up charges accrue from the Commencement Date (or where there is no Commencement Date the date the Service Order under this Agreement is accepted by Verizon) and are invoiced at any time thereafter. "Activation Date" means the earliest of (i) the date identified in this Agreement or related Service Order, as applicable, (ii) the date that Verizon informs Distributor that Services are ready for use, or (iii) the date Customer first uses the Services. "Commencement Date" means: (a) for the Agreement, the date on which Distributor executes and submits the Agreement to Verizon without alteration or the date on which both Distributor and Verizon have executed the Agreement, as applicable (provided that date is within the specified timeframe); and (b) for any Service Order, the date on which the Service Order is executed by Distributor or Verizon commences performance, whichever is the earlier.

Distributor acknowledges that hardware and subscription orders from Exhibit D are billed ninety ("90") days after order date; or, are billed when hardware and subscription are activated, whichever is earliest.

2.7 **Taxes and Governmental Charges.** All charges are exclusive of Taxes that the Distributor will pay. If Distributor provides Verizon with a valid, duly executed tax exemption certificate, Verizon will exempt Distributor in accordance with the law, effective on the date Verizon receives the exemption certificate. If Distributor is required by law to make any deduction or withholding from any payment due hereunder to Verizon, then, notwithstanding anything to the contrary contained in the Agreement, the gross amount payable by Distributor to Verizon will be increased so that, after any such deduction or withholding, the net amount received by Verizon will not be less than Verizon would have received had no such deduction or withholding been required. "Tax" or "Taxes" means applicable federal, state, local, foreign, sales, use, excise, utility, gross receipts, value-added and other taxes, tax-like charges, and tax-related and other surcharges. Additionally, Verizon may adjust or introduce Governmental Charges in order to recover amounts it is required or permitted by governmental or quasi-governmental authorities to collect from or pay to others in support of statutory or regulatory programs. "Governmental Charges" means charges Verizon is required or permitted to collect from or pay to others, by a governmental or quasi-governmental authority, which include, but are not limited to, universal service fund type charges and payphone use charges, or any successor of any such charges.

3 Term and Termination

3.1 **Term.** This Agreement shall commence on the Effective Date identified above, and shall continue in force for twelve (12) months ("Initial Term"), and shall continue for consecutive one year periods (each a "Renewal Term" and, together with the Initial Term, the "Term") unless a Party notifies the other of their intention not to renew thirty (30) days prior to the end of the then current Term.

3.1.1 **Termination.** In the event of termination of the Agreement pursuant to Sections 3.1.3 below, all Service Orders that are accepted by Verizon (or any Verizon Affiliate) prior to the effective date of termination will continue to be in force. For avoidance of doubt, in such event the Parties shall not enter into any new Service Orders following the date of termination.

3.1.2 **Insolvency Terminations.** Services may immediately be terminated by a Party by written notice (to the extent permitted by applicable law) if the other Party (a) has a receiver or an administrative receiver appointed over it or over any part of its undertaking or assets, or passes a resolution for winding up (other than for the purpose of a bona fide scheme of solvent amalgamation or reconstruction), or a court of competent jurisdiction makes an order to that effect; or (b) becomes subject to an administration order or enters into any voluntary arrangement with its creditors under which it ceases or threatens to cease to carry on business, or (c) undergoes or is subject to any analogous acts or proceedings under any foreign law. The circumstances set forth in the preceding sentence are referred to collectively in this Agreement as "Insolvency Events." In addition, either Verizon or Distributor may terminate a Contract immediately by written notice where, after expiration of all Service Commitments, no Services have been provided under the Contract for a continuous period exceeding three months, or (to the extent permitted by applicable law) if the other Party to the Contract has experienced any of the Insolvency Events. Notwithstanding the foregoing, a court order is not required to effect termination (or suspension) under this clause or any provision of the Termination for Cause and Service Suspension clause.

3.1.3 **Termination for Convenience.** Without prejudice to its other rights and remedies under Agreement, either Party shall be entitled (but not obliged) to terminate this Agreement by providing sixty (60) days' notice to the other Party, such notice to take effect immediately in the event that a Party:

3.1.3.1 undertakes or threatens to undertake any conduct which the aggrieved Party reasonably believes is capable of bringing them into disrepute;

3.1.3.2 ceases to perform its obligations hereunder in a manner consistent with the Verizon Training and Certification and the referenced Service Orders in relation to any Verizon Services and fails to demonstrate its compliance with the relevant obligations to Verizon's satisfaction within thirty (30) days following notification by Verizon thereof.

3.1.4 **Termination for Cause.** Either Party may give notice and immediately terminate the Agreement upon a breach by the other Party of any material provision of the Agreement (including in relation to a particular Contract) which: (i) is incapable of remedy; or (ii) if capable of remedy, remains uncured for thirty (30) days from written notice of such breach.

3.2 **Service Suspension.** Verizon may, subject to giving Distributor reasonable notice where practicable, suspend one or more Services (or a part thereof) if: (a) Distributor is past due on any invoice (that has not been the subject of a good faith dispute) for Services which has not been remedied within 45 days after Distributor receives notice of such non-payment; (b) suspension of Services is necessary to prevent or protect against fraud, or otherwise protect persons or property, Verizon's personnel, agents, facilities, or services; (c) Verizon is obliged to comply with an order, instruction or request of a court, government agency, emergency service organization (e.g., police or fire service) or other administrative or regulatory authority; or (d) Verizon has reasonable grounds to consider that use of the Service violates the Acceptable Use Policy or other terms of a Contract or this Agreement. Suspension of Services pursuant to sub-clause (a) which are past due shall be limited to the past dues Services and not to any Services which are current. To suspend Services pursuant to sub-clause (a) above, no notice is required beyond the 30 days stated therein. If sub-clause (a) above applies to all Services provided under this Agreement, Verizon may terminate this Agreement following the 30 days' notice stated therein. If Verizon exercises its right to suspend the Services, but not if Verizon terminates this Agreement, it will resume the Services as soon as practicable after the reason for suspension no longer exists (subject to the exercise of any termination right on the part of Verizon). If one or more Services (or part thereof) is suspended as a consequence of the breach, fault, act or omission of Distributor or any Distributor Affiliate, Distributor will pay to Verizon all reasonable costs and expenses incurred by the implementation of such suspension and/or reconnection of the Service.

3.3 **Termination Notices**.

3.3.1 **Service Order Termination.** Distributor must terminate a Service by providing written notice to Verizon which must include a termination date and receiving written confirmation of receipt from Verizon acknowledging the termination date.

3.3.2 **Termination Effective Date.** Notwithstanding any such termination, Distributor will remain liable for any applicable termination charges. Termination takes effect on the day that Verizon actually disconnects Service which will be the date specified by Distributor and acknowledged by Verizon. Distributor will be responsible for applicable charges until such date.

3.4 Consequences of Termination.

3.4.1 Upon the termination of the Agreement for any reason (including, without limitation, termination at either Party's discretion in accordance with Sections 3.1 and 3.3 above):

3.4.1.1 Distributor shall, within thirty (30) days and at its own cost, send to Verizon, or otherwise dispose of in accordance with the directions of Verizon, all Verizon Service documentation and any other Verizon materials then in the possession of Distributor;

3.4.1.2 Distributor shall cease to promote, market or distribute any Verizon Services; and

3.4.1.3 Distributor shall have no claim against Verizon (or any Verizon Affiliate) for any compensation for loss of

goodwill whatsoever.

3.4.2 **Early Termination Fees.** If a Contract or a Service is terminated by Distributor: in the first twelve (12) months of Verizon Service then Distributor will pay, refund or fee Verizon as applicable, without setoff or deduction, the following with respect to each of the Services affected by the termination, which Distributor acknowledges are liquidated damages reflecting a reasonable measure of actual damages and not a penalty: (i) all accrued but unpaid charges incurred through the duration of the initial 12-month period or the termination date, whichever is later ~~date of such termination~~; (ii) a pro rata portion of credits and waivers received by Distributor hereunder (except credits for Service failures, foreign tax credits, (if any) and any other credits or waivers explicitly excluded elsewhere); (iii) subject to mutual consent of both Parties, not to be unreasonably withheld, any termination charges or other costs or expenses incurred by Verizon for the cancellation of the related Services or Equipment and other third party services in connection with the affected Service(s); and (iv) subject to mutual consent of both Parties, not to be unreasonably withheld, any other applicable cancellation or termination charges. The termination liability provided in this clause is in addition to any other remedies available to Verizon.

4 Liability

4.1 **Limitation of Liability.** The total liability of either: (a) Distributor and Distributor Affiliates; or (b) Verizon and Verizon

Affiliates to the other party collectively, whether in contract, warranty, tort or otherwise (including negligence, strict liability, misrepresentation, and breach of statutory duty), including indemnity obligations under Section 6, in connection with the Agreement, all Service Orders and Services is limited to the aggregate amounts due from Distributor and Distributor Affiliates to Verizon and Verizon Affiliates under the Agreement and all Service Orders made pursuant to the Agreement for the six months prior to accrual of the latest cause of action for which the limitation of liability under this sub-clause is being calculated. For the avoidance of doubt, for the purposes of this clause the limits on liability expressed are cumulative and apply across all Services. Verizon's liability with respect to individual Services may also be limited pursuant to other terms and conditions of the Agreement or a Service Order. For the avoidance of doubt, Distributor's payment obligations for amounts due in connection with Services provided under this Agreement, including any Contract, shall not be limited by this Section 4.1.

4.2 **Exclusions. Neither Party is liable to the other for the following: special, incidental, exemplary, indirect or consequential damages, lost profits, lost business, lost value, loss of revenue, loss of goodwill, or loss of anticipated savings.** The following amounts are not subject to the above cap and limitations: (a) third party payments referred to in the paragraph below (Section 6.1); (b) intentional tortious conduct, (c) damages for bodily injury (including death); and (d) damages that cannot be limited under applicable law, including, but not limited to, mandatory local law.

5 Warranties

5.1 **Limited Warranty.** Verizon warrants that Equipment purchased hereunder will be free from material defects in material and workmanship that prevent the Equipment from functioning in accordance with its specifications for a period of twelve (12) months from shipment. Verizon warrants that the Services will materially conform to the applicable user documentation provided with the Services for the term of the applicable Service Order hereunder. Verizon warrants that Equipment installation services will be free from defects in workmanship for thirty (30) days from completion of such installation. Verizon will, at its discretion, repair or replace any Equipment with Equipment of equivalent functionality, and if applicable, remedy any defects in installation of the Equipment. Verizon will use commercially reasonable efforts to repair or replace non-conforming Services as a part of support and maintenance for the Services. THE REMEDIES IN THIS SECTION ARE THE SOLE OBLIGATIONS AND REMEDY FOR BREACH OF ANY WARRANTY.

5.2 **Exclusions**. The limited warranty does not cover any Equipment which: (i) has been repaired, disassembled, reverse engineered, decompiled, adjusted, altered, or modified in any way so as to, in the judgement of Verizon or its supplier, affect its stability and reliability; (ii) has an accessory purchased from any entity other than Verizon installed thereon; (iii) has been subject to misuse, abuse, negligence, accident, incorrect installation (unless installed by Verizon), or improper storage, maintenance, or operation; (iv) has had software installed on it by a party other than the original manufacturer or Verizon; (v) has been subjected to operating or environmental conditions that deviate from the Equipment's specifications; (vi) has been damaged due to acts of God; (vii) has been damaged due to service performed by an unauthorized entity; or (viii) has its serial number defaced, altered, or removed. The limited warranty does not extend to Map Data. Nothing will be construed as providing or intending to provide a limited warranty to a third party. The limited warranty will not apply if the applicable vehicle has more than one On-Board Diagnostic System II device connected to an On-Board Diagnostic System port at a time. The limited warranty does not extend to any accessories (e.g. panic switch, ID button, cables, and other accessories purchased for use with location tracking units) or tablets, except that Verizon will pass on to a Customer any manufacturer warranty made available by manufacturer, if applicable. Verizon does not warrant installations during any period, (a) against abuse, misuse, modification, or unintended use; or (b) an installation which results in covering or otherwise concealing an antenna.

5.3 **Disclaimer.** Except as expressly set out in this Agreement and/or a contract, all warranties, representations, or agreements, with respect to the provision of Services or otherwise, whether oral or in writing and whether express or implied, either by operation of law, statute or otherwise, are excluded to the extent permitted by law. Verizon does not warrant that any network, computer systems, or any portions thereof are secure. Verizon does not warrant that use of any of the Services will be uninterrupted or error-free or that Verizon will correct all defects or prevent third party disruptions or unauthorized third party access to the Services. The warranties explicitly set out in this Agreement and/or a contract are the exclusive warranties from Verizon and replace all other warranties, including the implied warranties or conditions of satisfactory quality, merchantability, non-infringement, and fitness for a particular purpose. Verizon warranties will not apply if there has been misuse, modification, damage not caused by Verizon, failure to comply with instructions provided by Verizon, or if otherwise stated in a contract, Service Order, or other materials provided by Verizon to Distributor. Distributor, on behalf of itself and

Distributor Affiliates, acknowledges and accepts the reasonableness of the disclaimers, exclusions, and limitations of liability set forth in the Agreement or an order form. "Affiliate" means any entity or person controlled by, controlling, or under common control with, a Party.

6 Indemnity

6.1 **General Indemnity.** Each Party (the "Indemnitor") shall defend and indemnify the other party (the "Indemnitee") for third party claims alleging: (i) an injury (including death) of any person, and (ii) damage to tangible personal property or real property proximately caused by the negligence or intentional tortious conduct of the Indemnitor.

6.2 **Distributor Indemnification.** Distributor shall defend and indemnify Verizon, its Affiliates and their respective directors, officers, employees, contractors, shareholders, partners, and/or any successors and/or assignees thereof, and their respective heirs and legal representatives (collectively, "Verizon Indemnitees"), from and against any and all losses, including all associated damages, suits, proceedings, liens, penalties, liabilities, awards or expenses, resulting from claims brought against the Verizon Indemnitees, and reasonable attorney's fees and expenses incurred in the enforcement of this indemnification, and reasonable attorney's fees and defense costs incurred by the Verizon Indemnitees with respect to a claim pursuant to this Section 6.2, including to the extent such losses result from:

6.2.1 Distributor's failure to comply with any laws or regulations;

6.2.2 Distributor's unauthorized use of Verizon's licensed marks;

6.2.3 any claims or liability arising as a result of Distributor's obligation or failure to flow-down applicable terms and conditions to Customer;

6.2.4 any claims or liability resulting from Distributor's inaccurate billing or failure to accurately bill any Customer as defined in a Billing Order;

6.2.5 a claim brought against the Verizon Indemnitees regarding infringement of a third party's intellectual property arising from or relating to any actual or alleged infringement or misappropriation of any patent, trademark, copyright, trade secret or any actual or alleged violation of any other intellectual property rights arising from or in connection with the performance by Distributor under this Agreement. Notwithstanding the foregoing, Distributor shall not be obligated to indemnify Verizon and the Verizon Indemnitees to the extent that such claims would not have arisen but for the infringement of the third party's intellectual property by Verizon; or

6.2.6 any claims that may be made: (a) by anyone for injuries (including death) to persons or damage to property resulting in whole or in part from the acts or omissions of Distributor or its agents; and (b); by anyone relating to any defect or problem in any product or service offered by Distributor or any of its Affiliates.

6.3 Verizon Indemnification.

6.3.1 Verizon shall defend and indemnify Distributor, its officers, employees and agents and the Customer against any third party claims, and all associated damages, suits, proceedings, liens, penalties, liabilities, awards or expenses (including reasonable attorney's fees), to the extent that such claims allege that Verizon's Equipment or Services infringes on the third party's intellectual property rights. Verizon shall only have an obligation under this section to the extent any such claim does not arise from: (1) modification or customization of the Equipment or the Service by anyone other than Verizon or its subcontractors or modification or customization by Verizon or its subcontractors at the request of Customer; (2) the combination of the Equipment and/or the Service with equipment or services other than those supplied by Verizon or its subcontractors; (3) the use, operation or maintenance of Equipment or the Service in a manner contrary to instructions provided by or on behalf of Verizon; (4) any infringement arising from data received, processed or transmitted by Verizon on behalf of Customer, or (5) compliance with any applicable Industry Technical Standards. As used herein, "Industry Technical Standards" means technical standards which are not wholly part of the Services or the Equipment, including but not limited to communication protocols, and positioning, cellular, or other radio connectivity technologies (e.g. A-GPS, GSM, UMTS, CDMA, LTE, WLAN 802.11, and WiMAX). Verizon shall have no obligation under this Section unless: (i) Distributor promptly notifies Verizon in writing of such claim, allegation, or suit with reasonable details setting forth why Distributor believes that Verizon has an indemnity obligation; (ii) Verizon, at its choice, shall have the sole control of the defense and/or settlement thereof; and (iii) Distributor furnishes to Verizon, on Verizon's request, all relevant information available to Distributor and reasonable cooperation for such defense. The obligations provided in this Section shall be the sole obligation of Verizon and the exclusive remedy of Customer with respect to any infringement claims based on the Services.

6.3.2 Verizon shall defend, indemnify and hold harmless Distributor, its officers, employees and agents against any and all third party claims and associated damages, suits, proceedings, liens, penalties, liabilities, award or expenses (including reasonable attorney's fees) resulting from (i) a claim that Verizon or its licensors and third party suppliers violated state or federal laws or regulations in the manufacture and provision of the Services; (ii) a claim for any property damages caused during Verizon's installation of any physical device that is part of the Services; (iii) personal injury or death arising in anyway, directly or indirectly, from the Services or Equipment, except to the extent such claims were caused in anyway, directly or indirectly, by Distributor's negligence, gross negligence or willful misconduct; or (iv) a claim based on or alleging faulty Services or Equipment. Verizon's indemnity obligation in this section is only applicable if Distributor gives Verizon written notice of the third party claim within fourteen (14) Business Days after receiving notice of the claim and permits Verizon to control, and cooperates with Verizon in, the defense of such claim and any related settlement negotiations. Verizon shall permit Distributor to participate with its counsel in the defense of the claim at its own expense; however, nothing herein shall limit Verizon's right to

control the defense.

7 Compliance with Laws/Governing Law

7.1 **Compliance with Laws.** Verizon and Distributor (and its users) shall comply with all laws and regulations applicable to their respective performance under this Agreement, including all mandatory legal and regulatory requirements in the jurisdiction where Services are to be provided.

7.2 **Governing Law.** Unless stated otherwise herein, the Agreement and all orders under it be governed and construed in accordance with the laws of the state of New York, without regard to its choice of law provisions, and in which forum the Parties consent to the exclusive jurisdiction thereof for any claim arising out of or relating to the Agreement and all orders under it. The United Nations Convention on Contracts for the International Sale of Goods does not apply to transactions under this Agreement.

8 Insurance

8.1 Distributor Insurance

8.1.1 Distributor shall at all times, at Distributor's sole expense, maintain: (a) Commercial General Liability Insurance against Claims for bodily and personal/advertising injury, property damage, products liability, independent contractors, and completed operations. Such insurance coverage shall be maintained under one or more policies of insurance from an insurance company with an A.M. Best rating of no less than A- and qualified to do business within the United States, providing a minimum liability protection of Five Million U.S. dollars ($5,000,000) per occurrence; (b) Workers' Compensation insurance as required by applicable law, regulation or statute; (c) Employers' Liability insurance with limits of not less than One Million U.S. dollars ($1,000,000) per occurrence (d) professional liability ("Errors and Omissions") insurance with a minimum limit of Five million U.S. dollars ($5,000,000) per claim for related services; and (e) such other insurance as Verizon may reasonably require from time to time.

8.1.2 Limits may be satisfied through a combination of primary and/or excess umbrella coverage. Legal expenses shall be afforded under each insurance policy outside of the policy limit so that legal expenses do not erode the limits of the policy.

8.1.3 Distributor shall name Verizon as an additional insured on all liability policies.

8.1.4 Distributor's general insurance shall be primary without contribution from Verizon coverage and shall include a waiver of subrogation in favor of Verizon.

8.1.5 Distributor shall furnish Verizon with certificate(s) of insurance evidencing such insurance as required herein on or before the Effective Date, with each policy renewal, and upon reasonable request thereafter, as Verizon deems necessary.

9 API Access Terms

9.1 **Definitions**. As used in this section, "API Information" means all information and data that is created, captured or is otherwise accessible from the Verizon APIs through Customer's use of the Services. "Verizon APIs" means Verizon's application program interfaces.

9.2 **License**. Subject to the terms and conditions of this Agreement, Verizon grants to Distributor during the Term a personal, revocable, limited, non-exclusive, royalty-free, non-sublicenseable, non-transferable, terminable license to access or otherwise receive information from the Verizon APIs and to obtain API Information. The license is granted solely to aid Distributor in its provision of Services to Customers and Distributor agrees that it will not access or use the Verizon APIs, or any information provided thereunder, for any other purpose.

9.3 **Access Tokens or Security Keys**. Verizon will give Distributor and/or Customer unique access token(s) or security key(s) to access the Verizon APIs for the purpose of accessing and receiving API Information. Distributor or Customer will immediately notify Verizon if Distributor's or Customer's access tokens or security keys are used or suspected of being used by a third party. Neither Distributor nor Customer will provide any third party with direct access, access token(s) or security key(s) for the Verizon APIs.

9.4 **Limitations and Restrictions**. The license granted to Distributor is subject to the following limitations and restrictions:

9.4.1 Verizon may, in its sole discretion, (a) modify, change, update and/or enhance the Verizon APIs at any time (a "Modification"), provided Verizon gives Distributor commercially reasonable notice and supports Distributor's access to the Verizon API in the same manner as prior to the Modification for a commercially reasonable period of time. Notwithstanding the foregoing, Verizon may suspend, terminate and/or revoke Distributor's access, or make a Modification without providing notice if necessary to address or prevent a security breach or to protect from the unauthorized disclosure of any API Information or other personally identifying information. In such circumstances Verizon will notify Distributor and use its best efforts to ameliorate any impact on Distributor or end users arising from such action.

9.4.2 Distributor acknowledges that, except as set forth in Section 9.2, nothing in this Agreement grants or assigns to Distributor or its Affiliates, or any third party, a right, title, interest or license of any kind, including in any patents, copyrights, trade secrets, trademarks, logos or other intellectual property, property or rights of Verizon.

9.4.3 Verizon may establish limits on the use of the Verizon APIs, including, but not limited to, the number of Verizon API requests initiated over a limited time period (i.e., per minute, hourly and daily) upon advance notice to Distributor and

only to protect the functioning, security, and/or reliability of the API Information and Verizon APIs. Verizon shall make commercially reasonable efforts to maintain the availability of the Verizon API but does not guarantee the service level quality of service of the Verizon APIs.

9.4.4 To the extent obtained by Distributor pursuant to this Agreement, Distributor will protect all API Information from unauthorized alteration, copying, access, storage, transmittal or use. Distributor must immediately notify Verizon of any unauthorized use, disclosure, or access to API Information.

9.4.5 Distributor will not (a) make derivative works of, reverse engineer, reverse compile or disassemble the Verizon APIs, or (b) access or use the Verizon APIs in any unauthorized manner, including any way that will (i) infringe on any Verizon or third party's copyright, patent, trademark, trade secret or other property rights or rights of publicity or privacy, or (ii) violate any applicable law, statute, ordinance or regulation.

9.5 **Distributor Security.** Distributor will not: (i) use any robot, spider, site search or other retrieval application or device to scrape, retrieve or index services or collect, disseminate, use, store or disclose information about Verizon customers for any unauthorized purpose; (ii) disable, override or otherwise interfere with any Verizon alerts, warnings, display panels, consent panels and the like; (iii) disrupt, disable, harm or otherwise impede the operation of any software, firmware, hardware, wireless communications device, computer system or network; (iv) enable any third party to access the Verizon APIs, the Verizon network or any Verizon platform or system for any reason unless permitted by this Agreement; or (v) take any action that affects any Verizon service provided to any Verizon customer. Distributor is solely responsible for protecting the confidentiality of any API Information or data that it collects or uses from the Verizon APIs.

9.6 ALL INFORMATION, MATERIALS, SOFTWARE, TECHNOLOGY, AND SERVICES PROVIDED BY VERIZON HEREUNDER, INCLUDING, BUT NOT LIMITED TO, THE VERIZON APIS, IS PROVIDED "AS IS" AND VERIZON DOES NOT MAKE, AND EXPRESSLY DISCLAIMS, ANY EXPRESS OR IMPLIED WARRANTIES, REPRESENTATIONS OR ENDORSEMENTS OF ANY KIND WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THE WARRANTIES OF TITLE OR NON-INFRINGEMENT. DISTRIBUTOR ASSUMES ALL RISK AS TO THE SUITABILITY, QUALITY, AND PERFORMANCE OF THE VERIZON APIS. VERIZON DOES NOT GUARANTEE THE COMPLETENESS, ACCURACY OR AVAILABILITY OF THE VERIZON APIS OR ANYTHING ELSE PROVIDED BY VERIZON HEREUNDER, OR ANY ANTICIPATED, CONTEMPLATED OR EXPECTED USE THEREOF, AND VERIZON EXPRESSLY DISCLAIMS ALL RESPONSIBILITY AND LIABILITY RELATED THERETO.

10 General

10.1 **Confidentiality.** Except as required by law or regulation, each party promises that during the Term of the Agreement and for three years after (except for information that qualifies as trade secret information, which must be maintained as confidential as required by applicable law), it will (i) use the other Party's Confidential Information only for purposes of this Agreement, (ii) not disclose it to third parties except as provided below, and (iii) protect it from disclosure using the same degree of care it uses for its own similar Confidential Information (but no less than a reasonable degree of care). Such Party may disclose the other Party's Confidential Information only to its employees, agents and subcontractors (including professional advisors and auditors), and to those of its Affiliates, who have a need to know for purposes of this Agreement, and who are bound to protect it from unauthorized use and disclosure under the terms of a written agreement at least as protective of the other Party's Confidential Information as the related terms of this Agreement. "Confidential Information" means information (in whatever form) (i) designated as confidential; (ii) relating to this Agreement or potential changes to it; (iii) relating to the other Party's business affairs, distributors, products, developments, trade secrets, know-how or personnel; or (iv) received or discovered at any time that this Agreement is in effect, or otherwise in connection with this Agreement, by a Party (including through an Affiliate or other agent), which information should reasonably have been understood as confidential information of the party (or one of its affiliates or subcontractors), either because of legends or other markings, the circumstances of disclosure or the nature of the information itself. "Confidential Information" does not include information that: (i) is in the possession of the receiving Party free of any obligation of confidentiality at the time of its disclosure, (ii) is or becomes publicly known other than by a breach of this provision, (iii) is received without restriction from a third party free to disclose it, or (iv) is developed independently by the receiving Party without reference to the Confidential Information. It is understood that the Service Website, reports generated by the Service Website including but not limited to the structure of the reports, the Server Software, the Remote Software, and the Map Data (in each case, as defined in Exhibit F attached hereto) constitute Confidential Information of Verizon or its supplier(s), whether or not marked or designated as confidential.

10.2 **Assignment.** Distributor may not assign this Agreement, in whole or in part, without the prior written consent Verizon, which may not be unreasonably withheld. Assignment of Verizon's rights to receive payments and by Verizon in conjunction with the sale of the portion of Verizon's business that includes the Services is not restricted. Verizon may assign rights and obligations related to equipment to a third party finance entity. All other assignments without prior written consent are void.

10.3 **Relationship of the Parties.** Verizon may use personnel, Affiliates, resources and third party suppliers in locations worldwide to support the delivery of the Services (including the transfer of Customer Data). Verizon is an independent contractor, not Distributor's agent, joint venturer, partner, or fiduciary, and does not undertake to perform any of Distributor's regulatory obligations, or assume any responsibility for Distributor's business or operations. Neither Party has authority to bind the other by contract or otherwise or to make representations as to the policies and procedures of the other, except as specifically provided in this Agreement. Verizon will not be responsible for worker's compensation, disability benefits, unemployment insurance, withholding taxes, social security or any other taxes or benefits for Distributor's employees. No right or cause of action for any third party is created by this Agreement or any transaction

under it. Nothing contained in this Agreement or arising out of or relating to the relationship between the Parties is intended, nor should be construed, to create any fiduciary duties on the part of Verizon. Neither Party will bring a legal action arising out of or related to this Agreement more than two years after the cause of action arose, other than a legal action by Verizon to enforce Distributor's payment obligation under this Agreement. Except and solely as provided in this Agreement, Distributor shall have no other power, express or implied, to act for or on behalf of Verizon. Each Party assumes full responsibility for the acts of its employees and for their supervision, daily direction and control.

10.4 **Applicability of Terms.** Any terms and conditions sent to Verizon by Distributor as a purchase order or otherwise, are void and of no effect and, will not supersede any terms and conditions in this Agreement. If any provision of this Agreement is held by any entity of competent jurisdiction to be unenforceable, the remainder of the terms remain enforceable. Failure or delay by any Party to exercise or enforce any right under this Agreement is not a waiver of that right. Certain provisions of the Agreement which are intended by their nature to survive expiration or termination (e.g., Limitation of Liability, Indemnification, and Customer Data) will survive such termination. This Agreement supersedes all prior or contemporaneous discussions, representations, offers, understandings, etc. between the Parties related to the subject matter hereof.

10.5 **NOTICE.** Except to the extent expressly provided otherwise in this Agreement, all notices required or permitted to be given shall be in writing and shall be valid and sufficient if sent by: (a) registered or certified mail, postage prepaid in any post office in the United States, return receipt requested; (b) hand delivery; (c) overnight courier prepaid; (d) email with confirmation of receipt; or (e) facsimile transmission upon confirmation of receipt, provided such notice is also mailed to the recipient pursuant to the requirements of (a) above within three (3) Business Days of such facsimile delivery. Administrative (but not breach) notices may be provided by: or (e) sending by e-mail. Notices shall be sent to the following address:

If to Verizon:

Verizon Connect, Inc.
5005 North Point
Parkway
Suite 1800
Alpharetta, Georgia
30022
Attn: General Counsel

If to Distributor:

AssetWorks LLC
998 Old Eagle School Road
Suite 1215
Wayne, PA
Attn: Rob Hallett
Rob.Hallett@assetworks.com

10.6 **Miscellaneous.** No right or cause of action for any third party is created by this Agreement or any transaction under it. Neither Party will bring a legal action arising out of or related to this Agreement more than two years after the cause of action arose. Neither Party is responsible for failure to fulfill its non-monetary obligations due to causes beyond its control including, but not limited to, acts of Gods, strikes, or governmental restrictions. Each Party will allow the other reasonable opportunity to comply before it claims the other has not met its obligations.

10.7 **Entire Agreement.** The Agreement, together with any Service Orders: (a) express the entire understanding of the respective Parties with respect to their subject matter; (b) supersede all prior or contemporaneous representations, solicitations, offers, understandings or agreements regarding their subject matter which are not fully expressed herein; and (c) contain all the terms, conditions, understandings, and representations of the Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized officers or representatives.

Name: Robert Hallett	Name: DocuSigned by: Shane Scoville 8852D3ACAB3C4C1...
Title: **General Manager**	Title: Sr. VP, Sales
Date: **10 March 2021**	Date: Mar-15-2021

Exhibit A – Service Order

Customer information	
Name:	
Website:	
Address:	
Phone:	

Primary point of contact	
Name:	
Title:	
Email:	
Phone:	
Address:	

Fleet information	
# of units	

Solution information					
Product	Number	Monthly $/product	One-Time $/product	Total Monthly $	Total One-Time $
Totals:					

Submitted by Distributor:

By: _____
Name: _____
Title: _____
Date: _____

Accepted by Verizon (if needed):

By: _____
Name: _____
Title: _____
Date: _____

Exhibit B – RESERVED

Exhibit C – Territory

The following countries and geographies are included in this Agreement:

- USA

Exhibit D – Equipment and Services; Rates

GOVERNMENT CUSTOMER PRICING

Product Number	Unit	Service	Self-Install Price
Vehicle Tracking Subscription	Month/Device	Vehicle Tracking Subscription (includes Reveal device, cable, and monthly software subscription)	$15.95
Powered Asset Tracking Solution	Month/Device	Provides reliable tracking for fixed and movable fleet assets such as trailers, containers/pods, generators, heavy duty equipment and more. This is a hard wired device. Includes device, wires, and monthly software subscription	$13.95
Non Powered Asset Tracking Solution	Month/Device	Provides reliable tracking for fixed and movable fleet assets such as trailers, containers/pods, generators, heavy duty equipment and more. This is a battery powered device with 4G technology, hardware device and monthly software subscription included.	$11.45
Integrated Video Forward Facing Camera	Month/Device	Integrated Video Forward Facing Camera hardware and monthly software application. VTU service is required.	$21.95
Product Number	**Unit**	**Software**	**Price**
Driving Style Subscription	Month/Device	VTU feature – Driving Style Subscription	$0.00
Engine Connect Data Subscription	Month/Device	VTU software feature – Engine Connect Data Subscription	$0.00
Fuel Card Integration Subscription	Month/Device	Fuel Card Integration Subscription	$0.00
PTO/Digital Input Subscription	Month/Device	A monthly surcharge for sensor monitoring per VTU or Asset Tracker	$0.00
Standard Integration Subscription	Month/Device	Standard Integration provides access to all connected base APIs	$0.00
Established Third Party Subscription	Month/Device	Established Third Party Subscription	$1.00
Panic Button Subscription	Month/Device	VTU Software - Panic Button Subscription	$1.00
30 Second Plotting Subscription	Month/Device	VTU feature - 30 Second Plotting Subscription	$0.00
Log Book Subscription – For Android and iOS, Mixed fleet and ECM compatible	Month/Device	Log Book helps you stay compliant with the FMCSA and manage your drivers' hours by combining necessary vehicle data with driver status from the Verizon Connect Android or iOS based mobile application	$4.95
Reveal Navigation	Month/Device	Mobile software app – keeps drivers safe by ensuring they travel on permitted roads only, avoiding restrictions like low bridges or tunnels all while providing up to date routes to avoid major accidents, constructions and road closings	$7.00
Field Service Dispatch Subscription	Month/Device	Software subscription allows you to quickly view the location of your techs/vehicles, monitor job progress in real time, then easily dispatch to available workers	$13.50
Product Number	**Unit**	**Add-On Service**	**Price**
Roadside Assistance Subscription	Month/Device	Roadside Assistance Subscription	$2.55
Product Number	**Unit**	**Accessory**	**Price**
Driver ID Subscription	Month/Device	Driver ID Subscription – Initial order includes Driver ID hardware and 3 key fobs	$0.00
Key Fob ID	Each	Key Fob ID	$2.50
128GB Upgrade Subscription	Month/Device	128GB Camera memory expansion card for integrated video	$2.00
64GB Upgrade Subscription	Month/Device	64GB Camera memory expansion card for integrated video	$1.00
Product Number	**Unit**	**Replacement Parts**	**Price**
Vehicle Tracking HW Replacement	Each	Vehicle Tracking HW Replacement (includes any associated cables/features that were with original hardware)	$145.00
Powered Asset HW Replacement	Each	Powered Asset HW Replacement (includes any associated cables/features that were with original hardware)	$125.00
Nonpowered Asset HW Replacement	Each	Nonpowered Asset HW Replacement (includes any associated cables/features that were with original hardware)	$125.00
Integrated Video Forward Facing HW Replacement	Each	Integrated Video Forward Facing HW Replacement (includes any associated cables/features that were with original hardware)	$345.00
Cable Replacement (Standalone)	Each	Standalone cable replacement fee	$30.00
Feature HW Replacement	Each	Standalone feature HW replacement fee	$45.00
Installation	Each	Per Device	$80.00

Billing Schedules

Deliverable	Billing Trigger	Frequency per month	Comments
Subscription service	90 days from service order or upon service activation	Once	Billed middle day of month
Hardware	Upon shipment	Multiple	
Installation	Device installation date	Multiple	
Technical Services	As specified in Statement of Work	Once	May vary based on milestone dates negotiated in the Statement of Work.

Exhibit E – Customer Support

The three levels of customer support responsibilities provided by Verizon are defined as follows:

Tier 1: Responsible for responding to frequently asked questions from customers like login problems, and non-reporting vehicles. Customer Support personnel in Tier 1 collect Customer information and diagnose the Customer's issue by analyzing the symptoms. Customer Support personnel in this group typically handle straightforward and simple problems with the assistance of a knowledge management tool. Tier 1 typically handles 70% - 80% of Customer issues before escalating to Tier 2.

Tier 2: Responsible for assisting Tier 1 Customer Support personnel with basic technical problems and for directly investigating issues elevated from Tier 1. To resolve issues, Tier 2 Customer Support personnel apply Known Solutions from the VZT Knowledge Base. Tier 2 Customer Support personnel typically have more experience and more in-depth product knowledge than Tier 1 personnel.

Tier 3: Responsible for engaging and managing the interaction with VZT Research & Development personnel. These cases are essentially special requests and may require changes to source code or technical workarounds.

Exhibit F – Customer Terms and Conditions

1. **LICENSES.** The Service is licensed to Customer on a subscription basis under a "Software as a Service" model through an access restricted website and related databases, servers, and software (collectively, the "**Service Website**" with the software residing on the server referred to herein as the "**Server Software**") to be used only in the United States or Canada. For certain Services, Verizon may provide Customer software to be installed on a permitted device or computer system (the "**Remote Software**") to access the Service Website or to use certain additional features of the Service.

2. **MAP DATA LICENSE.**

Subject to the terms and conditions of this Agreement, Verizon hereby grants to Customer a non-transferable, non-exclusive, limited right within the Territory to: (i) access and use the Server Software through the Service Website for its internal business purposes only; (ii) download one copy of the Remote Software to each permitted device or computer system; (iii) install and use, for its internal business purposes only, the Remote Software on each permitted device or computer system; and (iv) view any map data and satellite imagery provided as part of the Service (collectively, the **"Map Data"**). Note also that to use Google Maps/Google Earth, Customer must accept: (1) the Google Terms of Service, and (2) Google Maps/Google Earth Additional Terms of Service (the "Maps/Earth Additional Terms"). The Maps/Earth Additional Terms incorporate by reference the Legal Notices for Google Maps/Google Earth and Google Maps/Google Earth APIs and are located here: https://www.google.com/intl/en-US_US/help/terms_maps/.

(a) To the extent any vehicles, assets, mobile objects, or persons are tracked, routed, or managed using any Service, those vehicles, assets, mobile objects, or persons must be operating only within the Territory when they are tracked, routed, or managed. Customer and its employees, consultants and other authorized users of the Services shall be subject to the applicable click-through licenses (**"End User Terms"**), which are available at https://login.platform.telogis.com/terms.html. Customer acknowledges that its employees, consultants, agents, customers and other authorized users of the Services may be subject to the End User Terms and other Verizon policies, as the case may be.

(b) Use of certain Map Data is pursuant to the applicable End User Terms, privacy terms, terms of use and acceptable use policies. Map Data are to be used or viewed solely as part of the Service for Customer's internal business purposes only. Use of the Remote Software is subject to additional terms and conditions of the applicable click-through end user license agreements incorporated herein by reference and made available when the Remote Software is downloaded.

(c) Customer's employees, agents, customers and contractors (who are not competitors of Verizon or its Affiliates) may access the Service Website and Remote Software for Customer's business purposes. Customer's authorized customers may access certain features of the Service Website, provided that such customers agree to the applicable terms and conditions provided at https://login.platform.telogis.com/terms.html.

(d) Customer receives no title or ownership rights in or to such Equipment, Service Website, Server Software, Remote Software or Map Data. Customer acknowledges that the Equipment, Service Website, Server Software, Remote Software and Map Data are licensed to Customer pursuant to the terms and conditions of this Agreement and are not sold to Customer. Except for the license granted in this Section, all right, title, and interest in the Equipment, Service Website, Server Software, Remote Software, Map Data, and any derivative works in whole or in part of any of the foregoing shall remain the exclusive and proprietary property of Verizon or its licensors.

(e) Verizon owns all right, title, and interest, in and to the Equipment, Service Website, Server Software, Remote Software and Map Data, trade secrets, confidential information, and other proprietary or creative

ideas, information, and other material used by Verizon, developed by or for Verizon, or presented to Customer under this Agreement (collectively, "**Verizon Materials**"), including, but not limited to: software, modules, scripts, components, designs, utilities, databases, program listings, tools, models,

methodologies, programs, systems, analysis frameworks, leading practices, report formats, manner of data expression and specifications, including any copyrights, patents, or other intellectual property or proprietary rights in any of the foregoing, and any improvements, modifications, or derivative works of any of the foregoing.

3. CUSTOMER RESTRICTIONS:

a. Restrictions on Use: To the extent Verizon provides or otherwise makes available to Customer any Verizon Material, Confidential Information or non-public intellectual property, including proprietary information and know-how, techniques, algorithms, and processes provided by or contained in the Verizon Materials, or any modification or extraction thereof, Customer shall only use such materials in accordance with the terms and conditions of this Agreement. For the avoidance of doubt, Customer shall protect such materials and information pursuant to the terms of the Section entitled Confidentiality herein, as appropriate. With respect to Verizon Materials provided to or accessible by Customer, Customer will not: (a) copy or otherwise reproduce, whether in whole or in part, any of same unless expressly permitted herein; (b) modify or create any derivative works of same, or any portion thereof; (c) sell, rent, loan, license, sublicense, distribute, assign or otherwise transfer same or any portion thereof; (d) cause or permit the disassembly, decompilation or reverse engineering of any software components of same or otherwise attempt to gain access to the source code of such software components of same; (e) develop any other software, product, or service including, but not limited to, any other software, product or service that is competitive with the Equipment or Services, or (f) cause or permit any third-party to do any of the foregoing. Such restrictions shall survive the expiration or termination of this Agreement. Verizon has the right to revoke the use of the Verizon Materials at any time for breach of this provision. In such event, Customer shall, at its sole cost and expense, promptly return the affected materials to Verizon.

b. Collection and Use of Data: In the course of providing the Service, Verizon or its Affiliates may receive or collect spatial data or data relating to the vehicles, mobile objects, devices, locations, employees, contractors, suppliers, and/or customers of Customer, including but not limited to, vehicle identification number (VIN), GPS location, vehicle speed, acceleration, vehicle diagnostics information, names and ID numbers of employees, and addresses of customers ("Collected Data"). Customer agrees to notify its vehicle drivers and other authorized users of the Equipment that a vehicle has been fitted with Equipment enabled for the Services and that such Services include the collection of data points associated with the vehicle's location and manner of operation. If Customer has provided consent, Verizon may continue to receive and collect the Collected Data after the termination of the Services for purposes of facilitating third-Party Services that are requested by Customer. Customer agrees that, during and after termination of the Services, (i) Verizon may retain and use Collected Data for purposes of providing the Equipment, Services, Support Services, and Professional Services, and conducting research and development; (ii) Verizon may share Collected Data with Affiliates, and third-parties providing services to Verizon, subject to obligation of confidentiality; (iii) Verizon may disclose Collected Data if required under applicable law, regulation or court order; and (iv) Verizon may use and share with third-parties any Collected Data in aggregated or de-identified form such that the source of the Collected Data cannot be identified or that is publicly available without any restriction. Customer acknowledges that Collected Data may be commercially exploited by or on behalf of Verizon for commercial marketing purposes, subject to the permissions and restrictions set forth above and in this Agreement, and in Verizon's privacy policy (available at **www.verizon.com/privacy**). To the extent required by applicable law or regulation, Customer agrees to provide notice to and to receive consents from its vehicle drivers and other authorized users of:
(i) the nature of the Equipment and Service, (ii) Verizon's collection, use, and disclosure of Collected Data and Confidential Information, which may contain Personal Information from time to time, and (iii)

Verizon's tracking, recordation, processing and use of Collected Data and other information relating to such drivers' and users' whereabouts, movements, vehicle usage, and other activities.

c. Confidentiality. Except as required by law or regulation, Customer promises that during the term of the Service and for three years after, it will (i) use Verizon's Confidential Information only for purposes of using the Services, including related Equipment as contemplated by the Agreement, (ii) not disclose it to third parties except as provided below, and (iii) protect it from disclosure using the same degree of care it uses for its own similar Confidential Information (but no less than a reasonable degree of care). Customer may disclose Verizon's Confidential Information only to its employees, agents and subcontractors (including professional advisors and auditors), and to those of its affiliates, who have a need to know for purposes of this Agreement, and who are bound to protect it from unauthorized use and disclosure under the terms of a written agreement at least as protective of Customer's Confidential Information as the related terms of this Agreement. "Confidential Information" means information (in whatever form) (i) designated as confidential; (ii) relating to this Agreement or potential changes to it; (iii) relating to the other party's business affairs, distributors, products, developments, trade secrets, know-how or personnel; or (iv) received or discovered at any time that this Agreement is in effect, or otherwise in connection with this Agreement, by a party (including through an affiliate or other agent), which information should reasonably have been understood as confidential information of the party (or one of its affiliates or subcontractors), either because of legends or other markings, the circumstances of disclosure or the nature of the information itself.

d. Feedback. To the extent Customer or its employees, agents, or contractors provide Verizon with any suggestions, ideas, enhancement requests, recommendations, or feedback regarding any Equipment, Service, Remote Software, Server Software, Server Website, Collected Data, Map Data (including any road condition or location information), and/or Professional Service or Verizon otherwise conceives of or creates any ideas, enhancements, improvements, or modifications to the Equipment, Service, Remote Software, Server Software, Service Website, Collected Data, Map Data and/or Professional Service (collectively, "Feedback and Improvements"), Verizon will be free to use and disclose such Feedback and Improvements without any restriction or further obligation to Customer. Other than Customer's Confidential Information included in such Feedback and Improvements, Verizon shall own all right, title and interest in and to any such Feedback and Improvements, including Verizon's implementation of the same, and all intellectual property rights covering or derived therefrom.

4. Terms applicable for Customer API Access:

a. Customer acknowledges and agrees that Customer is responsible for protecting and securing all data, user names, and passwords from unauthorized use, whether such use is by Customer or by any other person/organization to whom Customer grants access (whether directly or through Verizon) ("Third Party"). Customer represents and warrants that it has obtained all relevant consents from end-users, employees, or relevant data subjects to this access. Customer agrees that access by the Third Party or any other person/organization to whom Customer provides access, directly or indirectly, is at Customer's sole risk and expense. Customer further agrees to indemnify and hold Verizon harmless from and against any and all claims, losses, costs, damages, and liabilities arising out of or in any way connected to or related to such access, including but not limited to the failure to obtain end user or data subject consent for this transfer or such access.

b. Subject to the terms and conditions of this Agreement, Verizon grants to Customer during the Term a personal, revocable, limited, non-exclusive, royalty-free, non-sublicenseable, non-transferable, terminable license to access or otherwise receive information from the Verizon application programming interfaces ("Verizon API") and to obtain information and data from the Verizon API relating to Customer ("API Information"). Verizon will provide Customer unique access token(s) or security key(s) to access the

Verizon APIs for the purpose of accessing and receiving API Information. Customer must immediately notify Verizon if Customer's access tokens or security keys are used or suspected of being used by a third party without authorization. Customer will protect all API Information from unauthorized alteration, copying, access, storage, transmittal or use. Customer must immediately notify Verizon of any unauthorized use, disclosure, or access to API Information.

c. Verizon may modify, change, update and/or enhance the Verizon APIs at any time (a "Modification"), provided Verizon gives Customer commercially reasonable notice and supports Customer's access to the Verizon API in the same manner as prior to the Modification for a commercially reasonable period of time. Notwithstanding the foregoing, Verizon may suspend, terminate and/or revoke Customer's access, or make a Modification without providing notice if necessary to address or prevent a security breach or to protect from the unauthorized disclosure of any API Information or other personally identifying information. In such circumstances Verizon will notify Customer and use reasonable efforts to ameliorate any impact on Customer arising from such action. Verizon provides no service level commitments or quality of service standards for the Verizon APIs.

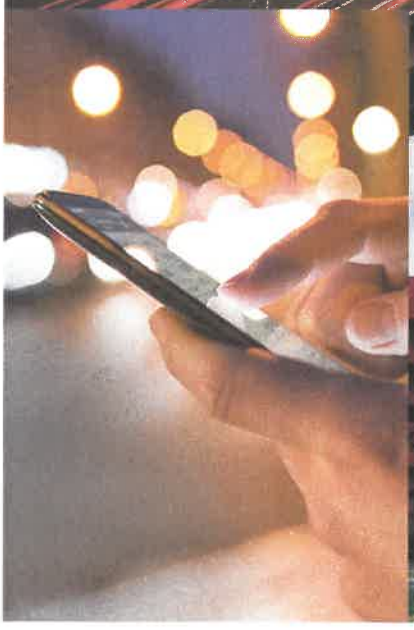
d. Customer will not: (a) make derivative works of, reverse engineer, reverse compile or disassemble the Verizon APIs; (b) access or use the Verizon APIs in any unauthorized manner, including any way that will (i) infringe on any Verizon or third party's copyright, patent, trademark, trade secret or other property rights or rights of publicity or privacy, or (ii) violate any applicable law, statute, ordinance or regulation;

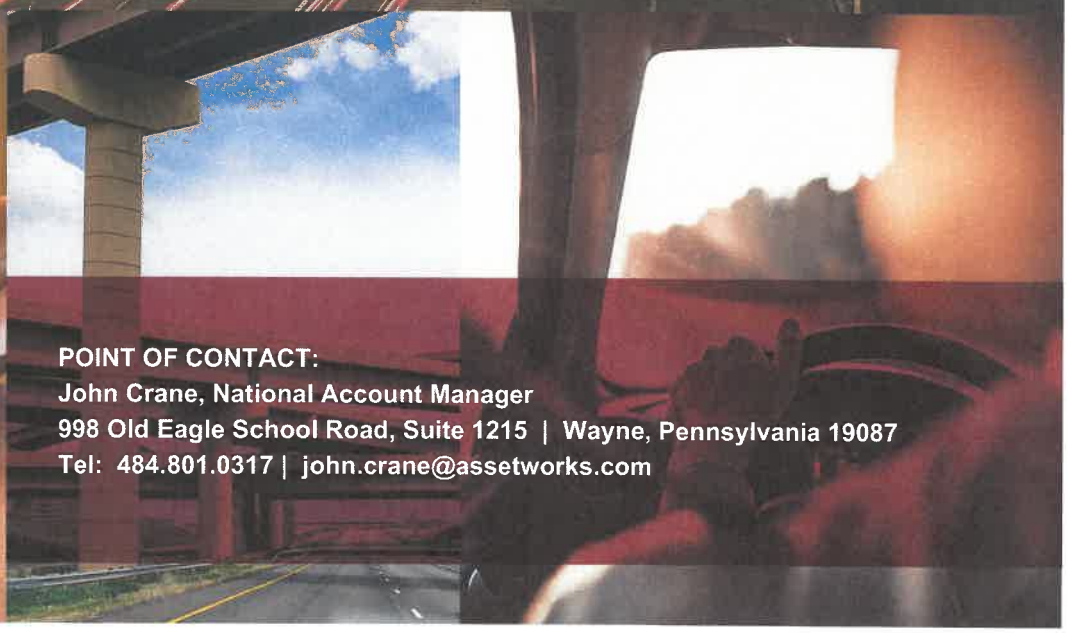
e. THE VERIZON APIS ARE PROVIDED "AS IS" AND VERIZON DOES NOT MAKE, AND EXPRESSLY DISCLAIMS, ANY EXPRESS OR IMPLIED WARRANTIES, REPRESENTATIONS OR ENDORSEMENTS OF ANY KIND WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THE WARRANTIES OF TITLE OR NON-INFRINGEMENT. VERIZON DOES NOT GUARANTEE THE COMPLETENESS, ACCURACY OR AVAILABILITY OF THE VERIZON APIS OR API INFORMATION, OR ANY ANTICIPATED, CONTEMPLATED OR EXPECTED USE THEREOF, AND VERIZON EXPRESSLY DISCLAIMS ALL RESPONSIBILITY AND LIABILITY RELATED THERETO.

AssetWORKS

AssetWorks Response to:

State of West Virginia
Request for Proposal #CRFP 0803
DOT2200000001
Fleet Management System
DUE DATE: 23 September 2021
COST PROPOSAL





POINT OF CONTACT:
John Crane, National Account Manager
998 Old Eagle School Road, Suite 1215 | Wayne, Pennsylvania 19087
Tel: 484.801.0317 | john.crane@assetworks.com

West Virginia Department of Transportation
CRFP No. DOT22*01

General Instructions

Vendor must indicate on the Cost Summary Sheet whether their proposal is a On-Premise or SaaS solution and complete either the On-Premise tab or the SaaS solution tab depending on its proposed deployment approach. Vendors proposing an On-Premise solution additionally need to provide additional data on the Cost Summary Sheet for columns identified as "D. Unit Price" and "E. Discount %" (not needed for SaaS solution), which are highlighted in light orange. Vendor should complete the deliverable pricing schedule. On the customizations tab, the Vendor should separately list out the cost of each customization identified in the Fleet a Equipment Management Requirements matrix. The total cost for customizations on this tab should tie out to the customization deliverable line on the deliverable tab. On the Managed Services tab, the Vendor should include the cost of providing the required 12 months of production support and the cost of two optional one year production support periods. On the rate sheet, the Vendor should enter rates by classification which will be utilized as the basis for negotiating any required change orders during the contract period.

West Virginia Department of Transportation

RFP No. CRFP DOT22*01 - Cost-Price Proposal

Cost Summary

Select On-Premise or SaaS Solution, set one to "Y" and one to "N"		
If On-Premise solution, provide the additional fields D. Unit Price, E. Discount % (not needed for SaaS solution)		
On-Premise Solution?	N	Y = On-Premise Solution, Any other Value represents a SaaS Solution

AssetWorks

1. Software - Core Solution	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
SaaS - EAM Annual Fee for States	748	54151	1	$ 132,000.00	0%	$ 132,000.00
SaaS - CAM Annual Fee for States	220	511210	1	$ 30,000.00	0%	$ 30,000.00
						$ -
						$ -
						$ -
						$ -
					Software Subtotal	$ 162,000.00

2. Third Party Products	A. SKU	B. Product No.	C. Quantity	D. Unit Price	E. Discount %	F. Total Price
			0	$ -	0%	$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Third Party Subtotal	$ -

3. Services		Total Price
Implementation (from Implementation Tab)		$ 1,433,980.00
	Impl Services Subtotal	$ 1,433,980.00

PROPOSED 4. Ongoing Costs	A. Base-Implementation	B. Base-Post Production	C. Option Term	D. Total Price (A+B+C)
Annual SaaS Subscriptions	$ 162,000.00	$ 486,000.00	$ 348,705.00	$ 996,705.00
Annual Third Party SaaS Subscription	$ -	$ -	$ -	$ -
SaaS-Application Managed Services		$ -	$ -	$ -
			Ongoing Costs Subtotal	$ 996,705.00

Total Contract Price (Sum of Subtotals of Section 3 and 4 only)	$ 2,430,685.00

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Fleet Implementation Services

AssetWorks

1. Deliverables/Miletones	A. Total Price
Project Work Plan	$13,166.95
Project Kick-off Meeting	$30,333.91
Project Management Plan	$16,458.69
Quality Management Plan	$10,972.46
Knowledge Transfer Plan	$10,972.46
Stakeholder Engagement Plan	$10,972.46
Organizational Change Management Plan	$10,972.46
Master Test Plan	$16,458.69
Data Conversion Plan	$10,972.46
Interface Plan	$13,166.95
Training Plan	$6,583.48
Go-Live Deployment Plan	$10,972.46
Post Go-Live Plan	$10,972.46
System Detailed Design Document (SDDD)	$132,731.92
Security Plan	$10,972.46
Requirements Traceability Matrix	$56,862.30
Configured Software	$59,251.29
Unit Tested Interface Programs	$4,388.98
Unit Tested Conversion Programs	$4,388.98
Mock Data Conversion 1	$65,834.76
Mock Data Conversion 2	$70,223.75
Unit Tested Custom Objects (Forms, Reports, Workflows) - ***ties to Customizations Subtotal for Fleet***	$ 393,400.00
System Test Report	$6,583.48
Integration Test Report	$6,583.48
Security Test Report	$10,972.46
Performance Test Report	$10,972.46
User Acceptance Test Report	$28,528.40
Training Materials	$32,917.38
Training Course Pilot (pre User Acceptance Test)	$43,500.86
End-user Training	$23,750.43
Enterprise Readiness Plan	$13,166.95
OCM Support/Materials per approved plan	$32,917.38
Cut-over to Production	$43,306.37
Acceptance	$209,750.00
Fleet Services Subtotal	**$ 1,433,980.00**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal

Customization Cost - Complete By Phase for Each Item in Requirements Matrix Classifed as Customization or Third-Party Customization

AssetWorks

Customization Name/Description	Requirement #	Complexity	Price
Fleet Customizations			
CAM - Phase 1 - Assets, Analytics and Planning Deployment (3 travel trips)	RFP Section: 4.2.2.3.5	Large	$56,480.00
CAM - Phase 2 - Procurement & Disposal Deployment (2 travel trips)	RFP Section: 4.2.2.3.5	Large	$33,520.00
CAM - CAM Requisition to wvOASIS Advantage Financials Interface	RFP Section: 4.2.2.3.5	Large	$31,980.00
CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface	RFP Section: 4.2.2.3.5	Large	$29,930.00
CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface	RFP Section: 4.2.2.3.5	Large	$29,930.00
FA - Asset Create Interface - wvOASIS Advantage Financials to FA	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - Asset Create/Update Interface - FA to BRIM	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials	RFP Section: 4.2.2.3.5	Medium	$18,860.00
FA - Labor output from wvOASIS to FA for purpose of outputting Billing	RFP Section: 4.2.2.3.5	Medium	$17,220.00
FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA	RFP Section: 4.2.2.3.5	Medium	$15,990.00
FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface	RFP Section: 4.2.2.3.5	Large	$31,980.00
FA - Asset Create/Update Interface - FA to Fuel Master	RFP Section: 4.2.2.3.5	Medium	$15,170.00
FA - External Fuel Interface - Fuel Master to FA	RFP Section: 4.2.2.3.5	Small	$9,020.00
FA - Asset Create/Update and Work History on Asset - DOA to FA	RFP Section: 4.2.2.3.5	Large	$26,240.00
FA - Billing Module Output Interface File - FA to DOA	RFP Section: 4.2.2.3.5	Medium	$18,040.00
FA - Accounts Interface - wvOASIS to FA	Optional; included based on technical diagram	Medium	$15,990.00
FA - Vendors Interface - wvOASIS to FA	Optional; included based on technical diagram	Small	$12,710.00
		Total Cost, Fleet Customizations	**$ 393,400.00**

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
On-Premise
Annual Software Maintenance

AssetWorks

1. Annual Software Maintenance - Core Solution	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
EAM Standard License for States	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00
CAM Standard License for States	$ 140,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00	$ 140,000.00
Software Maintenance: Implementation		$ 980,000.00	Software Maintenance: Post-Production Base Contract		$ 1,470,000.00

1. Annual Software Maintenance - Core Solution	Post Production Options		
	2026	2027	Total Price
EAM Standard License for States	$ 367,500.00	$ 385,875.00	$ 753,375.00
CAM Standard License for States	$ 147,000.00	$ 154,350.00	$ 301,350.00
Software Maintenance - Post Production Options			$ 1,054,725.00

1. Annual Software Maintenance - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Maintenance: Implementation		$ -	Software Maintenance: Post-Production Base Contract		$ -

1. Annual Software Maintenance - Third Party	Post Production Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Maintenance - Post Production Options			$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
SaaS Solution
Annual Software Subscriptions

AssetWorks

1. Annual Software Subscription	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
SaaS - EAM Monthly Fee $11,000.00 *Invoicing begins on da	$ -	$ 132,000.00	$ 132,000.00	$ 132,000.00	$ 132,000.00
SaaS - CAM Monthly Fee $2,500.00 based on number of asse	$ -	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00
Software Subscription - Implementation		$ 162,000.00	Software Subscription - Post Production Base Contract		$ 486,000.00

1. Annual Software Subscription	Post Production - Options		
	2026	2027	Total Price
SaaS - EAM Monthly Fee	$ 138,600.00	$ 145,530.00	$ 284,130.00
SaaS - CAM Monthly Fee based on number of assets (2,500-	$ 31,500.00	$ 33,075.00	$ 64,575.00
Software Subscription - Post Production Options			$ 348,705.00

1. Annual Software Subscription - Third-Party	Implementation		Post Production Base Contract		
	2021	2022	2023	2024	2025
	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -
Software Subscription - Implementation		$ -	Software Subscription - Post Production Base Contract		$ -

1. Annual Software Subscription - Third-Party	Post Production - Options		
	2026	2027	Total Price
	$ -	$ -	$ -
	$ -	$ -	$ -
Software Subscription - Post Production Options			$ -

West Virginia Department of Transportation

CRFP No. DOT22*01 Cost-Price Proposal
All Solutions
Application Managed Services

AssetWorks

1. Application Managed Services	Base	Options Period	
	2023	2024	2025
	$ -	$ -	$ -
Application Managed Services-Base	$ -	Appl Managed Services-Options Period	$ -

Total Price - Managed Services	$ -

WVDOT Fleet System
CRFP No. DOT22*01
RATE SHEET

AssetWorks

Instructions: Vendors shall complete and submit this Rate Sheet. Vendors shall include billing rates for key staff that may provide professional services under this contract. Billing Rates shall be fully-burdened and include overhead, other direct costs and profit. These rates shall be used as a basis for the purchase of additional professional services under this Contract.

Item No.	Role	Role Description	Unit	Billing Rate
1	EAM Fleet Sr Project Manager	Serves as the primary contact with customer and works closely with other staff on a variety of tasks to	Hour	$205.00
2	EAM Fleet Software Sr Developer	Maintenance of the AssetWorks software product codes and extension of the product. Serves as a	Hour	$205.00
3	EAM Fleet Implementation Speciali	Working with customers on-site and remotely to provide software training to personnel involved with	Hour	$205.00
4	EAM Fleet Software Installation Eng	Supports the Project Manager in working with the customer during the installation of the AssetWorks	Hour	$205.00
5	EAM Fleet Software Documentatior	Prepare technical and complex documentation in support of the product or engagement under the	Hour	$205.00
6	EAM Fleet Software System Archite	Lead the overall design and development effort from a technical and functional perspective. Responsible	Hour	$205.00
7			Hour	$
8			Hour	$
9			Hour	$
10			Hour	$
11			Hour	$
12			Hour	$
13			Hour	$
14			Hour	$
15			Hour	$

PRICING EXPLANATION – CRFP 0803 DOT2200000001

AssetWorks is pleased to provide an explanation of pricing for the software and services to fully deploy the *AssetWorks EAM SaaS* solution. AssetWorks' method of licensing our EAM product allows us to provide our product to an *unlimited number of users*, an *unlimited number of CPUs or mobile units* on which the application can run, and an *unlimited number of assets* managed within the EAM system.

SAAS SUBSCRIPTION (SOFTWARE-AS-A-SERVICE)

Our SaaS Subscription model *includes all software licensing, maintenance, support, and hosting* for a fixed fee of $11,000.00 per month ($132,000.00 annually for year 1 and for each subsequent year thereafter). For complete cost and value transparency, we have outlined the AssetWorks EAM Core Bundle which consists of the EAM base license plus additional modules, portals and functionality recommended to complete the full EAM solution.

SaaS Subscription Fees			
Description	QTY	UNIT PRICE	ANNUAL TOTAL
EAM Core Bundle - SAAS YEAR 1	12	*$11,000.00*	*$132,000.00*
CAM Core Bundle - SAAS YEAR 1	12	*$2,500.00*	*$30,000.00*
EAM Standard Base License		Included	Included
Asset Management		Included	Included
Capital Planning		Included	Included
Asset Performance Assessment Tool		Included	Included
Capital Asset Management		Included	Included
Mapping Functionality		Included	Included
MobileFocus Enterprise Suite		Included	Included
Esri GIS Integration		Included	Included
Customer Access		Included	Included
MAXQueue Integration Engine		Included	Included
Work and Inventory Management (Shop Activity)		Included	Included
Motor Pool and Reservations			
KPI/Dashboards		Included	Included
Ad-Hoc Query Tool		Included	Included
Reporting Module powered by Crystal Reports		Included	Included
		Year 1 SaaS Fees	*$162,000.00*

PROFESSIONAL SERVICES FOR IMPLEMENTATION

Professional services work may be tailored to meet stringent turnkey requirements, or alternatively, services can be scaled back to allow the customer to be more involved in defining business requirements, managing the project, and providing training resources. AssetWorks suggest reviewing the SOW and implementation pricing in a pre-award discovery session. AssetWorks has provided a complete Statement of Work, Milestone Billing Schedule, and Project Plan for full breakdown and summary based on our understanding of the requirements for the RFP.

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

WV DOT RFP (09.20.21)			
AssetWorks EAM/FleetFocus Implementation Milestones			
#	WVDOT Pricing Sheet Deliverables	FleetFocus & CAM Milestone Names	Milestone Amount (USD)
EAM-1	Project Work Plan	Deliver initial project work plan	$13,166.95
EAM-2	Project Kick-off Meeting	Conduct onsite kick-off meeting - 1 travel trip with two resources	$30,333.91
EAM-3	Project Management Plan	Deliver project management plan	$16,458.69
EAM-4	Quality Management Plan	Deliver quality management plan	$10,972.46
EAM-5	Knowledge Transfer Plan	Deliver knowledge transfer plan	$10,972.46
EAM-6	Stakeholder Engagement Plan	Deliver stakeholder engagement plan	$10,972.46
EAM-7	Organizational Change Management Plan	Deliver organizational change management plan	$10,972.46
EAM-8	Master Test Plan	Deliver master test plan	$16,458.69
EAM-9	Data Conversion Plan	Deliver data conversion plan	$10,972.46
EAM-10	Interface Plan	Deliver interface plan	$13,166.95
EAM-11	Training Plan	Deliver training plan	$6,583.48
EAM-12	Go-Live Deployment Plan	Deliver go-live deployment plan	$10,972.46
EAM-13	Post Go-Live Plan	Deliver post go-live plan	$10,972.46
N/A	System Detailed Design Document (SDDD)		N/A
EAM-14	System Detailed Design Document (SDDD)	Complete Business Process Design Workshops - 1 travel trip with one resource	$33,182.98
EAM-14.1	System Detailed Design Document (SDDD)	Deliver Conference Room Pilot - 1 travel trip with two resources	$33,182.98
EAM-14.2	System Detailed Design Document (SDDD)	Deliver Business Process Review TO BE Report	$33,182.98
EAM-14.3	System Detailed Design Document (SDDD)	Deliver system setup sessions	$33,182.98
EAM-15	Security Plan	Deliver security plan	$10,972.46
N/A	Requirements Traceability Matrix		N/A
EAM-16	Requirements Traceability Matrix	Deliver fit/gap and requirements - 1 travel trip with one resource	$28,431.15
EAM-16.1	Requirements Traceability Matrix	Deliver requirements traceability matrix	$28,431.15
EAM-17	Configured Software	Configure SOW Listed FleetFocus Modules per WBS A.4.1	$59,251.29

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

EAM-18	Unit Tested Interface Programs	Deliver overview sessions on MAXQueue interface program and interface testing methodology	$4,388.98
EAM-19	Unit Tested Conversion Programs	Deliver overview and data conversion tools training and conversion methodology	$4,388.98
N/A	Mock Data Conversion 1		N/A
EAM-20	Mock Data Conversion 1	Mock Data Conversion 1 - Load Equipment, Parts & Summary Cost History in Test	$32,917.38
EAM-20.1	Mock Data Conversion 1	Mock Data Conversion 1 - Load 3 Years Historical Work Order Detail for Active Assets in Test	$35,111.87
N/A	Mock Data Conversion 2		N/A
EAM-21	Mock Data Conversion 2	Mock Data Conversion 2 - Load Equipment, Parts & Summary Cost History in Production	$32,917.38
EAM-21.1	Mock Data Conversion 2	Mock Data Conversion 2 - Load 3 Years Historical Work Order Detail for Active Assets in Production	$35,111.87
EAM 22	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 1 - Assets, Analytics and Planning Deployment (2 travel trips of one resource)	$56,480.00
EAM 23	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - Phase 2 - Procurement & Disposal Deployment (2 travel trips of one resource)	$33,520.00
EAM 24	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Specifications	$19,188.00
EAM 25	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Requisition to wvOASIS Advantage Financials Interface - Deliver Interface	$12,792.00
EAM 26	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Specifications	$17,958.00
EAM 27	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - wvOASIS Advantage Financials Purchase Order to CAM Interface - Deliver Interface	$11,972.00
EAM 28	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Specifications	$17,958.00

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

EAM 29	Unit Tested Custom Objects (Forms, Reports, Workflows)	CAM - CAM Goods Receipt to wvOASIS Advantage Financials Interface - Deliver Interface	$11,972.00
EAM 30	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Specifications	$9,102.00
EAM 31	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create Interface - wvOASIS Advantage Financials to FA - Deliver Interface	$6,068.00
EAM 32	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Specifications	$9,102.00
EAM 33	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to BRIM - Deliver Interface	$6,068.00
EAM 34	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Specifications	$11,316.00
EAM 35	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Work Order and Task Info Extract Interface - FA to wvOASIS Advantage Financials - Deliver Interface	$7,544.00
EAM 36	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Specifications	$10,332.00
EAM 37	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Labor output from wvOASIS to FA for purpose of outputting Billing - Deliver Interface	$6,888.00
EAM 38	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Specifications	$9,594.00
EAM 39	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Usage Tickets Create Interface - wvOASIS Advantage Financials HRM to FA - Deliver Interface	$6,396.00
EAM 40	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Specifications	$19,188.00
EAM 41	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Parts Master / Inventory Sync / Parts Issue & Returns Interface - Deliver Interface	$12,792.00
EAM 42	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Specifications	$9,102.00

© 2020 AssetWorks LLC | All Rights Reserved. | www.assetworks.com

EAM 43	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update Interface - FA to Fuel Master - Deliver Interface	$6,068.00
EAM 44	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Specifications	$5,412.00
EAM 45	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - External Fuel Interface - Fuel Master to FA - Deliver Interface	$3,608.00
EAM 46	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Specifications	$15,744.00
EAM 47	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Asset Create/Update and Work History on Asset - DOA to FA - Deliver Interface	$10,496.00
EAM 48	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Specifications	$10,824.00
EAM 49	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Billing Module Output Interface File - FA to DOA - Deliver Interface	$7,216.00
EAM 50	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$9,594.00
EAM 51	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Accounts Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$6,396.00
EAM 52	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Specifications *(Optional)*	$7,626.00
EAM 53	Unit Tested Custom Objects (Forms, Reports, Workflows)	FA - Vendors Interface - wvOASIS to FA - Deliver Interface *(Optional)*	$5,084.00
EAM 54	System Test Report	Deliver system test report	$6,583.48
EAM 55	Integration Test Report	Deliver integration test report	$6,583.48
EAM 56	Security Test Report	Deliver security test report	$10,972.46
EAM 57	Performance Test Report	Deliver performance test report	$10,972.46
EAM 58	User Acceptance Test Report	Deliver user acceptance test report	$28,528.40
EAM 59	Training Materials	Deliver training materials	$32,917.38
EAM 60	Training Course Pilot (pre User Acceptance Test)	Deliver pre-training and assist customer in user acceptance testing for ten days - 1 travel trip with two resources	$43,500.86
EAM 61	End-user Training	Deliver train-the-trainer training - 2 travel trips with one resource	$23,750.43
EAM 62	Enterprise Readiness Plan	Deliver enterprise readiness plan	$13,166.95
EAM 63	OCM Support/Materials per approved plan	Deliver OCM materials	$32,917.38

© 2020 AssetWorks, LLC | All Rights Reserved | www.assetworks.com

EAM 64	Cut-over to Production	Assist customer in deployment of go live checklist and assist onsite for 3 weeks - 3 travel trips with one resource	$43,306.37
EAM 65	Acceptance	26 weeks onsite at maximum of 3 days per week; includes 2 trips for PM; travel included at $56,000.	$209,750.00
		Total Professional Services Costs (Inclusive of 13 - FleetFocus, 4 - CAM & 28 - post implementation travel trips)	$1,433,980

PRICING SUMMARY

SaaS Subscription Year 1:

Total Cost Summary – Year 1	
Description	ANNUAL TOTAL
Year 1 SaaS Fees + SaaS Setup Fee	$162,000.00
Professional Services Total for Deployment	$1,433,980.00
Cost Summary - Year 1	$1,595,980.00

© 2020 AssetWorks, LLC | All Rights Reserved. | www.assetworks.com